



Colorado Department of Public Health and Environment

OPERATING PERMIT

AMERICAN GYPSUM COMPANY – EAGLE PLANT

First Issued: June 17, 1997

Renewed: January 1, 2012

AIR POLLUTION CONTROL DIVISION

COLORADO OPERATING PERMIT

FACILITY NAME:	American Gypsum Company – Eagle Plant	OPERATING PERMIT NUMBER
FACILITY ID:	0370029	95OPEA041
RENEWED:	January 1, 2012	
EXPIRATION DATE:	January 1, 2017	
MODIFICATIONS:	See Appendix F of Permit	

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO:

American Gypsum Company
7715 Tiburon NE
Albuquerque, NM 87109

PLANT SITE LOCATION:

740 Hwy. 6
Gypsum, CO 81637
Eagle County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received: March 16, 2007 and March 23, 2011
And Additional Information Received:

Nature of Business: Gypsum Wallboard Manufacturing
Primary SIC: 3275

RESPONSIBLE OFFICIAL

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Title: Plant Manager
Phone: (505) 823-2022

FACILITY CONTACT PERSON

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SUBMITTAL DEADLINES

Semi-Annual Monitoring Periods: January 1 – June 30, July 1 – December 31
Semi-Annual Monitoring Report: August 1, 2012 & February 1, 2013 & subsequent years
Annual Compliance Periods: January 1 – December 31
Annual Compliance Certification: February 1, 2013 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports/certifications.

TABLE OF CONTENTS:

SECTION I - General Activities and Summary.....	1
1. Permitted Activities	1
2. Alternative Operating Scenarios	2
3. Prevention of Significant Deterioration	7
4. Accidental Release Prevention Program (112(r))	8
5. Compliance Assurance Monitoring (CAM)	8
6. Summary of Emission Units.....	9
SECTION II - Specific Permit Terms.....	10
1. P001 - Two Allison Gas Turbines	10
2. Dry Additives and Crushed Ore Storage.....	16
P003 - Schick Dry Additives Conveying System w/Baghouse Control	16
P010 - Three (3) Crushed Ore Storage Bins, Each Bin w/Baghouse Control	17
3. Facility Raw Gypsum Ore Processing Sources, Calcined Ore (Stucco) Storage and Accelerator Mill	19
P007 - Rock Receiving Station w/Baghouse Control	19
P006 - Crushing Ore w/Baghouse Control	20
P008 - Stucco Storage: Associated Screw Conveyors, Elevators and Vents w/Baghouse Control.....	20
P011 - Accelerator Mill w/Baghouse Control.....	21
4. Facility Process Sources Not Subject to NSPS OOO Requirements	24
P004 - End Trim Reclaim System w/Baghouse Control	24
P005 - Paper Creasing, Scoring and Buffing System w/Baghouse Control.....	25
P021 -Starch Storage Silo with Bin Vent Filter	25
P022 - Dunnage Cutting Machine with Baghouse	26
5. P012 - Three Impact Mills Each w/ Natural Gas Burners (22.5 MMBTU/hr) and Each w/Baghouse Control	30
6. P015 - 4 Zone, 10 Deck Wallboard Dryer (35 MMBTU/hr Burner each Zone).....	34
7. P018 - Two Detroit Diesel Internal Combustion Engines Powering Emergency Generators (2010 HP)	36
8. P020 - Waste Reclaim System (Crusher, Hopper and Conveyors) w/ Baghouse Control	42
9. P023 - Gypsum Mineral Mining Operation Fugitive Emissions	45
10. P025 - Cummins diesel fired reciprocating internal combustion engine (207 HP)	47
11. NSPS General Provisions	50
12. Particulate Matter Emission Periodic Monitoring Requirements.....	51
13. Short-Term Particulate Matter Emission Standards	52
14. Compliance Assurance Monitoring (CAM) Requirements	52
SECTION III - Permit Shield	58
1. Specific Non-Applicable Requirements	58
2. General Conditions	59
3. Streamlined Conditions	59
SECTION IV - General Permit Conditions (ver. 11/16/2010)	60
1. Administrative Changes	60
2. Certification Requirements.....	60
3. Common Provisions	60
4. Compliance Requirements	64
5. Emergency Provisions	65

TABLE OF CONTENTS:

6.	Emission Controls for Asbestos	65
7.	Emissions Trading, Marketable Permits, Economic Incentives	65
8.	Fee Payment	65
9.	Fugitive Particulate Emissions	66
10.	Inspection and Entry	66
11.	Minor Permit Modifications	66
12.	New Source Review	66
13.	No Property Rights Conveyed.....	66
14.	Odor.....	66
15.	Off-Permit Changes to the Source.....	67
16.	Opacity	67
17.	Open Burning	67
18.	Ozone Depleting Compounds	67
19.	Permit Expiration and Renewal.....	67
20.	Portable Sources	67
21.	Prompt Deviation Reporting	67
22.	Record Keeping and Reporting Requirements	68
23.	Reopenings for Cause.....	69
24.	Section 502(b)(10) Changes	69
25.	Severability Clause.....	69
26.	Significant Permit Modifications	70
27.	Special Provisions Concerning the Acid Rain Program.....	70
28.	Transfer or Assignment of Ownership	70
29.	Volatile Organic Compounds.....	70
30.	Wood Stoves and Wood burning Appliances.....	71
APPENDIX A - Inspection Information		1
Directions to Plant:		1
Safety Equipment Required:		1
Facility Plot Plan:.....		1
List of Insignificant Activities:		1
APPENDIX B		1
Reporting Requirements and Definitions.....		1
Monitoring and Permit Deviation Report - Part I		5
Monitoring and Permit Deviation Report - Part II.....		7
Monitoring and Permit Deviation Report - Part III		9
APPENDIX C Format for Annual Compliance Certification Reports.....		1
APPENDIX D Notification Addresses		1
APPENDIX E Permit Acronyms		1
APPENDIX F Permit Modifications		1
APPENDIX G Example Daily Inspection Log		1
APPENDIX H Compliance Assurance Monitoring Plan		1

SECTION I - General Activities and Summary

1. Permitted Activities

- 1.1 The American Gypsum Company – Eagle facility mines and processes gypsum rock and uses it to produce wallboard at a rate of 750 million square feet per year. Gypsum is mined at the quarry and if necessary, screened to separate oversized material. The gypsum is then transported a short distance to the plant via end loaders. Once at the wallboard plant the gypsum is loaded onto belly dump trucks and moved to the rock receiving station, where it is conveyed to the rock storage building. Rock is stored and then conveyed to the crushing station. Crushed ore is conveyed to one of three storage bins then on to a calcining system, consisting of three impact mills (and associated furnaces). A small portion of the ore is sent directly to the landplaster (accelerator) mill, without calcining. Material from the landplaster mill is stored and eventually combined with other materials, including sugar, starch, vermiculite and boric acid, in the dry additives conveying process.

Calcined ore (stucco) is conveyed via screw to the stucco elevator and then on to the two stucco storage bins. The stucco is then combined with other materials (see above) in the dry additives conveying system. Wet additives are combined to form a slurry, which is placed between two layers of paper, then scored and buffed. The wallboard is conveyed and hardened, then sent through a series of three dryer zones. The finished product is trimmed and stacked, with the scrap returned to the beginning of the process. Off-specification wallboard is recycled at a maximum rate of 30 tons per hour. The wallboard product is loaded on both truck and railcar for transportation off site.

Power for the facility is provided by two natural gas fired cogeneration turbines, operating a maximum of 8,760 hours per year per turbine. Backup diesel generators provide power in the event of turbine malfunction. A diesel generator provides power to equipment at the mine.

The facility is located on Highway 6 near the town of Gypsum, CO, Eagle County. The area in which the plant operates is designated as attainment for all criteria pollutants.

There are no affected states within 50 miles of the plant. The following Federal Class I designated areas are within 100 kilometers of the plant: Eagles Nest, Flat Tops, Maroon Bells - Snowmass, and West Elk National Wilderness Areas.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for

purposes of this Operating Permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following Colorado Construction Permits: 89EA432-(1-7), (9-13), 94EA540, 84EA192-3F, 00EA0038, and 02EA0239.

- 1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section II – Conditions 4.4.1 (opacity), 4.5 and 6.4 (NSPS general provisions), and 5.5 (SO₂) and Section IV - Conditions 3.d, 3.g (last paragraph), 14 and 18 (as noted)
- 1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit.

2. Alternative Operating Scenarios

The following Alternative Operating Scenario (AOS) for temporary and permanent combustion turbine replacement, turbine component replacement and stationary compression ignition engine has been reviewed in accordance with the requirements of Regulation No. 3., Part A, Section IV.A, Operational Flexibility-Alternative Operating Scenarios, and Regulation No. 3, Part B, Construction Permits, and Regulation No. 3, Part D, Major Stationary Source New Source Review and Prevention of Significant Deterioration and has been found to meet all applicable substantive and procedural requirements. This permit incorporates and shall be considered a Construction Permit for any combustion turbine replacement performed in accordance with this AOS, and the permittee shall be allowed to perform such turbine or turbine component replacement without applying for a revision to this permit or obtaining a new Construction Permit.

2.1 Routine Turbine Component Replacements

The following physical or operational changes to the turbines in this permit are not considered a modification for purposes of NSPS GG, NSR/PSD, or Regulation No. 3:

- 2.1.1 Replacement of stator blades, turbine nozzles, turbine buckets, fuel nozzles, combustion chambers, seals, and shaft packings, provided that they are of the same design as the original.
- 2.1.2 Changes in the type or grade of fuel used, if the original gas turbine installation, fuel nozzles, etc. were designed for its use.
- 2.1.3 An increase in the hours of operation (unless limited by a permit condition)
- 2.1.4 Variations in operating loads within the engine design specification.
- 2.1.5 Any physical change constituting routine maintenance, repair, or replacement.

Turbines undergoing any of the above changes are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit. If replacement of any of the components listed in (1) or (5) above results in a change in serial number for the turbine, a letter explaining the action as well as a revised APEN and appropriate filing fee shall be submitted to the Division within 30 days of the replacement.

Note that the repair or replacement of components must be of genuinely the same design. Except in accordance with the Alternate Operating Scenario set forth below, the Division does not consider that this allows for the entire replacement (or reconstruction) of an existing turbine with an identical new one or one similar in design or function. Rather, the Division considers the repair or replacements to encompass the repair or replacement of components at a turbine with the same (or functionally similar) components.

2.2 Turbine Replacement

The following AOS is incorporated into this permit in order to deal with a turbine breakdown or periodic routine maintenance and repair of an existing onsite turbine that requires the use of a temporary replacement turbine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period. The 90 days is the total number of days that the turbine is in operation. If the turbine operates only part of a day, that day counts towards the 90 day total. Note that the compliance demonstrations made as part of this AOS are in addition to any compliance demonstrations required by this permit.

All replacement turbines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit.

Results of all tests and the associated calculations pursuant required by this AOS shall be submitted to the Division within 30 calendar days of the test. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The permittee shall maintain a log on-site to contemporaneously record the start and stop date of any turbine replacement, the manufacturer, model number, horsepower, and serial number of the turbine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement turbine.

Any permanent turbine replacement under this AOS may result in the replacement turbine being considered a new affected facility for purposes of NSPS and shall be subject to all applicable requirements of that Subpart including, but not limited to, any required Performance Testing.

- 2.2.1 The permittee may temporarily replace an existing permitted turbine provided such replacement turbines are Allison 501KB combustion turbines without modifying this permit, so long as the emissions from the temporary replacement turbine comply with the emission limitations for the existing permitted turbine as determined in Section

2.3. Measurement of emissions from the temporary replacement turbine shall be made as set forth in Section 2.3.

The permittee may temporarily replace a grandfathered turbine or a turbine that is not subject to emission limits without modifying this permit. In this circumstance, potential annual emissions of NO_x and CO from the temporary replacement turbine must be less than or equal to the potential annual emissions of NO_x and CO from the original grandfathered turbine or for the turbine that is not subject to emission limits, as determined by applying appropriate emission factors (e.g. AP-42 or manufacturer's emission factors).

2.2.2 The permittee may permanently replace the existing permitted combustion turbine provided such replacement turbines are Allison 501KB combustion turbines without modifying this permit so long as the emissions from the permanent replacement turbine comply with the emission limitations for the existing permitted turbine as determined in Section 2.3.

An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model, and serial number of the permanent replacement turbine shall be filed with the Division for the permanent replacement turbine within 14 calendar days of commencing operation of the replacement turbine. The APEN shall be accompanied by the appropriate APEN filing fee and a cover letter explaining that the permittee is exercising an alternative operating scenario and is installing a permanent replacement turbine.

This AOS cannot be used for permanent turbine replacement of a grandfathered turbine or a turbine that is not subject to emission limits.

The permittee shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent turbine replacement.

2.3 Portable Analyzer Testing

The permittee shall measure nitrogen oxide (NO_x) and carbon monoxide (CO) emissions in the exhaust from the replacement turbine using a portable flue gas analyzer within seven (7) calendar days of commencing operation of the replacement engine.

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver March 2006 or newer) as found on the Division's website at: <http://www.cdphe.state.co.us/ap/down/portanalyzeproto.pdf>

Results of the portable analyzer tests shall be used to monitor the compliance status of this unit. For comparison with an annual or short term emission limit, the results of the tests shall be converted to a lb/hr basis and multiplied by the allowable operating hours in the month or year (whichever applies) in order to monitor compliance. If a source is not limited in its hours of

operation the test results will be multiplied by the maximum number of hours in the month or year (8760), whichever applies.

If the portable analyzer results indicate compliance with both the NO_x and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the turbine is in compliance with both the NO_x and CO emission limitations for the relevant time period.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, if the portable analyzer results fail to demonstrate compliance with either the NO_x or CO emission limitations, the turbine will be considered to be out of compliance from the date of the portable analyzer test until a portable analyzer test indicates compliance with both the NO_x and CO emission limitations or until the turbine is taken offline.

2.4 Engine Replacement

The following AOS is incorporated into this permit in order to deal with an engine breakdown or periodic routine maintenance and repair of an existing onsite engine that requires the use of either a temporary or permanent replacement engine. "Temporary" is defined as in the same service for 90 operating days or less in any 12 month period. "Permanent" is defined as in the same service for more than 90 operating days in any 12 month period. The 90 days is the total number of days that the engine is in operation. If the engine operates only part of a day, that day shall count as a single day towards the 90-day total. The compliance demonstrations and any periodic monitoring required by this AOS are in addition to any compliance demonstrations or periodic monitoring required by this permit.

All replacement engines are subject to all federally applicable and state-only requirements set forth in this permit (including monitoring and record keeping), and shall be subject to any shield afforded by this permit.

The results of any all tests and the associated calculations required by this AOS shall be submitted to the Division within 60 days. Results of all tests shall be kept on site for five (5) years and made available to the Division upon request.

The permittee shall maintain a log on-site and contemporaneously record the start and stop date of any engine replacement, the manufacturer, date of manufacture, model number, horsepower, and serial number of the engine(s) that are replaced during the term of this permit, and the manufacturer, model number, horsepower, and serial number of the replacement engine.

2.4.1 The permittee may temporarily replace an existing engine that is covered by this permit with a different engine without modifying this permit, so long as the temporary replacement engine complies with all permit limitations and other requirements applicable to the existing engine. Calculation of emissions from the temporary replacement engine shall be made as set forth in Condition 2.4.3.

The permittee may temporarily replace a grandfathered or permit exempt engine or an engine that is not subject to emission limits without modifying this permit. In this circumstance, potential annual emissions from the temporary replacement engine must be less than or equal to the potential annual emissions from the original grandfathered or permit exempt engine or for the engine that is not subject to emission limits, as determined by applying appropriate emission factors (e.g. AP-42 or manufacturer's emission factors).

- 2.4.2 The permittee may permanently replace an existing engine that is covered by this permit with a different engine without modifying this permit so long as the emissions from the permanent replacement engine complies with any permit limitations and other requirements applicable to the existing engine as well as any new applicable requirements for the replacement engine. Calculation of emissions from the temporary replacement engine shall be made as set forth in Condition 2.4.3.

An Air Pollutant Emissions Notice (APEN) that includes the specific manufacturer, model and serial number and horsepower of the permanent replacement engine shall be filed with the Division for the permanent replacement engine within 14 calendar days of commencing operation of the replacement engine. The APEN shall be accompanied by the appropriate APEN filing fee, a cover letter explaining that the permittee is exercising an alternative operating scenario and is installing a permanent replacement engine and an analysis of any new applicable requirements for the replacement engine as required by Condition 2.2. This submittal shall be accompanied by a certification from the Responsible Official indicating that "based on the information and belief formed after reasonable inquiry, the statements and information included in the submittal are true, accurate and complete".

This AOS cannot be used for permanent engine replacement of a grandfathered or permit exempt engine or an engine that is not subject to emission limits.

The permittee shall agree to pay fees based on the normal permit processing rate for review of information submitted to the Division in regard to any permanent engine replacement.

- 2.4.3 Compliance of the replacement engine with the applicable emission limitations of the original engine shall be monitored by one of the following methods:

- 2.4.3.1 Manufacturer certified emission factors showing compliance.
- 2.4.3.2 Stack tests of same make and model showing compliance. This would only be considered if the test was done under similar conditions to Colorado (i.e. at altitude).
- 2.4.3.3 Stack tests on the engine.

2.5 Applicable Regulations for Permanent Engine Replacements

2.5.1 NSPS for stationary compression ignition internal combustion engines: 40 CFR Part 60, Subpart IIII.

A permanent replacement engine that is ordered after July 11, 2005 and manufactured after April 1, 2006 or is modified or reconstructed after July 11, 2005 is subject to the requirements of 40 CFR Part 60, Subpart IIII. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

Note that under the provisions of Regulation No. 6. Part B, section I.B. that Relocation of a source from outside of the State of Colorado into the State of Colorado is considered to be a new source, subject to the requirements of Regulation No. 6 (i.e., the date that the source is first relocated to Colorado becomes equivalent to the date of manufacture for purposes of determining the applicability of NSPS IIII requirements).

2.5.2 MACT for Stationary Reciprocating Internal Combustion Engines:40 CFR Part 63, Subpart ZZZZ.

Any permanent replacement engine located at either an area or major source is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ. An analysis of applicable monitoring, recordkeeping, and reporting requirements for the permanent engine replacement shall be included in any request for a permanent engine replacement.

2.6 Additional Sources

The replacement of an existing turbine or engine with a new turbine or engine is viewed by the Division as the installation of a new emissions unit, not "routine replacement" of an existing unit. The AOS is therefore essentially an advanced construction permit review. The AOS cannot be used for additional new emission points for any site; a turbine or engine that is being installed as an entirely new emission point and not as part of an AOS-approved replacement of an existing onsite turbine or engine has to go through the appropriate Construction/Operating permitting process prior to installation.

3. Prevention of Significant Deterioration

- 3.1 Based on the information provided by the applicant, this source is categorized as a minor stationary source for PSD as of the issue date of this permit. Any future modification which is major by itself (Potential to Emit of > 250 TPY) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements
- 3.2 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

4. Accidental Release Prevention Program (112(r))

- 4.1 Based upon the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

5. Compliance Assurance Monitoring (CAM)

- 5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Unit P004 – End Trim Reclaim

Unit P007 – Rock Receiving

Unit P012 – Impact Mills

See Section II, Condition 14 for compliance assurance monitoring requirements.

6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Stack Number	Description	Pollution Control Device
P001	001	Two (2) Allison Natural Gas Fired Co-Generation Turbines rated at 30 MMBtu/hr, Model 501-KB5, Serial Nos. ASP742 and ASP912. Propane is Used as Back-Up Fuel.	Uncontrolled
P003	003	Schick Dry Additives Conveying System, Serial No. 84-AJ16	Schick Baghouse
P004	004	End Trim Reclaim of Scrap Product, Process Design Associates - Custom	Aeropulse Baghouse (PR-256-10-C-N)
P005	005	Paper Creasing, Scoring and Buffing System, ABB Raymond	Aeropulse Baghouse (PR-9-10-H-N)
P006	006	Crushing of Ore, Process Design Associates - Custom	Aeropulse Baghouse (PR-54-10-H-N)
P007	007	Rock Receiving Station, Process Design Assoc.-Custom	Aeropulse Baghouse (PR-54-10-WP-N)
P008	008	Two (2) Screw Conveyors and Bucket Elevators for Transport of Calcined Ore to Enclosed Stucco Storage, Stucco Vents, Process Design Assoc.- Custom	Aeropulse Baghouse (PR-361-10-H-N) & (PR-225-10-H-N)
P010	010	Three (3) Crushed Ore Storage Bins, Process Design Assoc. – Custom. Each bin feeds one impact mill.	Aeropulse Baghouse (5B-9-10-N)
P011	011	Accelerator (Landplaster) Mill, Raymond #10	Micropulse Baghouse (16S-6-30)
P012	012	Three (3) Impact Mills (Raymond #83). Equipped with Direct Natural Gas Fired North American 6795-14-54 Burners (22.5 MMBtu/hr each)	Micropulse Baghouse (620-3-10 TRH)
P015	015	COE, Four (4) Zone, Ten (10) Deck Wallboard Dryer Equipped with One (1) COE Eclipse Natural Gas Fired Burner Per Zone (35 MMBtu/hr)	Uncontrolled
P018	018	Two (2) Detroit Model 16V-149TI Internal Combustion Engines Used to Power Back-Up Generators, Max Design 2010 HP, Serial Nos. 16E-9937, 16E-9938	Uncontrolled
P020	019	Waste Reclaim System Consisting of Crusher and Conveyors for Recycling Off-Specification Wallboard (Rated at 30 tons/hr)	Camco Baghouse 120TR144
P021	020	Starch Storage Silo	Bin Vent Filter
P022	022	Tech Air Systems, Model No. 64AVS8 Style III, Dunnage Cutting Machine	Baghouse
M003	023	Gypsum Mineral Mining Operation Fugitive Emissions	Uncontrolled
M006	025	One (1) Cummins, Model CT8.3-G2 B990858973, diesel fired reciprocating internal combustion engine (207 HP)	Uncontrolled

SECTION II - Specific Permit Terms

1. P001 - Two Allison Gas Turbines

Unless otherwise specified the limits provided in this table are for **both** Turbines.

Parameter	Permit Condition Number	Limitations		Emission Factor (lb/MMBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
PM	1.1	for each turbine: 0.206 lb/MMBtu			Fuel Restriction	Only Natural Gas or Propane are Used As Fuel
CO	1.2		45.7 tons/yr	0.18	Portable Monitoring (Condition 1.8), Recordkeeping and Calculation	Semi-Annually, Monthly
NO _x	1.3	170 ppmvd @ 15% O ₂ & at ISO standard ambient conditions - for each turbine	127 tons/yr	0.43	Portable Monitoring (Condition 1.8), Performance Test, Recordkeeping and Calculation	Semi-Annually, One-Time, Monthly
SO ₂	1.4	for each turbine: 150 ppmvd @ 15% O ₂ OR Use of Fuel Which Contains Less than 0.8 Weight % Sulfur			Fuel Restriction	Only Natural Gas or Propane is Used as Fuel
		for each turbine: 0.8 lb/MMBtu				
Fuel Consumption	1.5		Natural Gas - 508 MMscf/yr Propane – N/A		Fuel Meter	Monthly
Opacity - for Each Turbine	1.6	Not to Exceed 20% Except as Provided Below			Fuel Restriction	Only Natural Gas or Propane is Used as Fuel
		For Startup - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes				
NSPS General Provisions	1.7				As Required by NSPS General Provisions	
Portable Monitoring	1.8				Portable Flue Gas Analyzer	Annually

- 1.1 Particulate Matter (PM) emissions **from each turbine** shall not exceed the above limitations (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed since only natural gas and propane are permitted to be used as fuel in the turbines.

The numeric PM standards were determined using the design heat input for the turbine (30 MMBtu/hr) in the following equation:

$$PE = 0.5 \times (FI)^{-0.26}, \quad \text{where:} \quad \begin{array}{l} PE = \text{particulate standard in lb/MMBtu} \\ FI = \text{fuel input in MMBtu/hr} \end{array}$$

- 1.2 **Total** Emissions of CO **from both turbines** shall not exceed the limitations stated above (Colorado Construction Permit 89EA432-1, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limit shall be monitored as follows:

- 1.2.1 The emission factors listed above (from stack tests conducted March 27 and 28, 1991 plus 20%) have been approved by the Division and shall be used to calculate emissions from the turbines, except as provided for below.

Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor, the monthly fuel consumption and the heating value of the fuel in the equation below:

$$\text{tons/month} = \frac{[EF \text{ (lb/MMBtu)} \times \text{fuel usage (MMscf/month)} \times \text{heat content of fuel (MMBtu/MMscf)}]}{2000 \text{ lb/ton}}$$

A twelve month rolling total of emissions will be maintained to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

If a reference method test is conducted under the provisions of Condition 1.2.2, and the results of the testing show emissions of CO to be above the emission factors listed above, the emission factor determined during that test (or any future such tests) and approved by the Division shall be used in the above equation starting with the month that the test was performed and for all subsequent calculations. In addition, the permittee shall re-calculate all twelve month rolling total, annual, or short-term emissions (whichever apply) using the emission rates determined by the tests since the last Division-approved EPA Reference Tests. In the absence of credible evidence to the contrary, the turbine will be considered to be out of compliance for any periods that the recalculated emissions are greater than the CO emission limitation. In addition, the permittee shall apply for a modification to this permit to reflect the higher emission factor within 30 days of Division approval of the new emission factor.

If the results of the reference method testing conducted under the provisions of Condition 1.2.2 are below the emission factors listed above, emissions may be

calculated using the new lower emission factor provided that subsequent testing as required by Condition 1.2.2 demonstrates compliance with this new factor. If the source chooses to use the new lower emission factor, the permittee shall apply for a modification to this permit to reflect the lower emission factor within 30 days of Division approval of the new emission factor.

- 1.2.2 Portable monitoring shall be conducted semi-annually, in accordance with the provisions in Condition 1.8
- 1.3 Emissions of Nitrogen Oxides are subject to the following limitations:
 - 1.3.1 NO_x emissions **from each turbine** shall not exceed 170 ppmv at 15% oxygen on a dry basis at ISO standard ambient conditions (40 CFR Part 60 Subpart GG § 60.332(c), as adopted by reference in Colorado Regulation No. 6, Part A). Compliance with the NO_x limitation shall be monitored as follows:
 - 1.3.1.1 Portable monitoring shall be conducted semi-annually in accordance with the provisions in Condition 1.8.
 - 1.3.1.2 A performance test shall be conducted in accordance with the provisions in Condition 12.2.
 - 1.3.2 **Total** NO_x emissions **from both turbines** shall not exceed the annual limitations stated above (Colorado Construction Permit 89EA432-1, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limitation shall be monitored as follows:
 - 1.3.2.1 The emission factors listed above (from stack tests conducted March 27 and 28, 1991 plus 20%) have been approved by the Division and shall be used to calculate emissions from the turbines, except as provided for below.

Monthly emissions shall be calculated by the end of the subsequent month using the above emission factor, the monthly fuel consumption and the heating value of the fuel in the equation provided in Condition 1.2.1. A twelve month rolling total of emissions will be maintained to monitor compliance with the annual emission limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

If a reference method test is conducted under the provisions of Condition 1.3.2.2, and the results of the testing show emissions of NO_x to be above the emission factors listed above, the emission factor determined during that test (or any future tests) and approved by the Division shall be used in the above equation starting with the month that the test was performed and for all subsequent calculations. In addition, the permittee shall re-calculate all twelve month rolling total, annual, or short-term emissions

(whichever apply) using the emission rates determined by the tests since the last Division-approved EPA Reference Tests. In the absence of credible evidence to the contrary, the turbine will be considered to be out of compliance for any periods that the recalculated emissions are greater than the NO_x emission limitation. In addition, the permittee shall apply for a modification to this permit to reflect the higher emission factor within 30 days of Division approval of the new emission factor.

If the results of the reference method testing conducted under the provisions of Condition 1.3.2.2 are below the emission factors listed above, emissions may be calculated using the new (lower) emission factor provided that subsequent testing as required by Condition 1.3.2.2 demonstrates compliance with this new factor. If the source chooses to use the new lower emission factor, the permittee shall apply for a modification to this permit to reflect the lower emission factor within 30 days of Division approval of the new emission factor.

1.3.2.2 Portable monitoring shall be conducted semi-annually in accordance with the provisions in Condition 1.8.

1.4 Emissions of Sulfur Dioxide are subject to the following limitations:

1.4.1 **Each turbine** shall meet one of the following requirements:

1.4.1.1 Sulfur Dioxide (SO₂) emissions from each turbine shall not exceed 150 ppmvd at 15% O₂,

OR

1.4.1.2 No fuel, which contains sulfur in excess of 0.8 percent by weight, shall be used in these combustion turbines (40 CFR Part 60 Subpart GG §§ 60.333(a) & (b), as adopted by reference in Colorado Regulation No. 6, Part A).

In the absence of credible evidence to the contrary, compliance with the above requirements is presumed when natural gas is used as fuel. The permittee shall maintain records demonstrating that the natural gas burned meets the definition of natural gas as defined in 40 CFR Part 60 Subpart GG § 60.331(u) (20 grains or less of total sulfur per 100 standard cubic feet). The demonstration shall be made using the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less (40 CFR Part 60 Subpart GG § 60.334(h)(3)(i)). These records shall be made available to the Division upon request.

1.4.2 Sulfur Dioxide (SO₂) emissions **from each turbine** shall not exceed 0.8 lb/MMBtu, on a 3-hr rolling average (Colorado Regulation No. 1, Section VI.B.4.c.(i) and VI.B.2). In the absence of evidence to the contrary, compliance with the SO₂ limit

shall be presumed since only natural gas or propane is permitted to be used as fuel for these turbines.

- 1.5 **Total** natural gas consumption **from both turbines** shall not exceed the limitation stated above (Colorado Construction Permit 89EA432-1, as modified under the provisions of Section I, Condition 1.3). Both natural gas and propane consumption shall be measured and recorded on the first working day of each month using the turbine fuel meters. Monthly natural gas consumption shall be summed and used in a twelve month rolling total to monitor compliance with the annual limitation. Monthly propane consumption shall be summed and used in a rolling twelve month total and shall be made available to the Division upon request. Each month a new twelve month total shall be calculated using the previous twelve months data.

Note that use of propane has been identified as a back-up fuel; significant usage of propane may be cause to reopen this permit and include appropriate applicable requirements for propane use.

- 1.6 Visible emissions shall not exceed 20% opacity (Colorado Construction Permit 89EA432-1 and Colorado Regulation No. 1, Section II.A.1) except during periods of startup when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each turbine**. In the absence of credible evidence to the contrary, compliance with the opacity limit shall be presumed since only natural gas or propane is permitted to be used as fuel for these units.

Propane shall be used as a backup fuel only. Dates and times of propane use shall be recorded in a log to be made available to the Division upon request. Significant usage of propane may be cause to reopen this permit and include appropriate applicable requirements and periodic monitoring for propane use.

- 1.7 These turbines are subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these turbines are subject to the requirements identified in Condition 12.
- 1.8 Emission measurements of nitrogen oxides (NO_x) and carbon monoxide (CO) **from each turbine** shall be conducted semi-annually using a portable flue gas analyzer. At least one calendar quarter shall separate the semi-annual tests. Note that if the turbine is operated for less than 100 hrs in any quarterly period, then the portable monitoring requirements do not apply.

All portable analyzer testing required by this permit shall be conducted using the Division's Portable Analyzer Monitoring Protocol (ver. March 2006 or newer) as found on the Division's website at: <http://www.cdphe.state.co.us/ap/download/portanalyzeproto.pdf>

Results of the portable analyzer tests shall be used to monitor the compliance status of this unit. For comparison with an annual emission limit, the results of the tests shall be converted to a lb/hr basis and multiplied by the maximum number of hours in a year (8760).

If the portable analyzer results indicate compliance with both the NO_x and CO emission limitations, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the NO_x and CO emission limitations for the relevant time period.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, if the portable analyzer results fail to demonstrate compliance with either the NO_x or CO emission limitations, the engine will be considered to be out of compliance from the date of the portable analyzer test until a portable analyzer test indicates compliance with both the NO_x and CO emission limitations or until the engine is taken offline.

For comparison with the emission rates/factors, the emission rates/factors determined by the portable analyzer tests and approved by the Division shall be converted to the same units as the emission rates/factors in the permit. If the portable analyzer tests shows that either the NO_x or CO emission rates/factors are greater than the relevant ones set forth in the permit, and in the absence of subsequent testing results to the contrary (as approved by the Division), the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher emission rate/factor within 60 days of the completion of the test.

Results of all tests conducted shall be kept on site and made available to the Division upon request.

2. Dry Additives and Crushed Ore Storage

P003 - Schick Dry Additives Conveying System w/Baghouse Control

Parameter	Permit Condition Number	Limitations Short Term Long Term		Compliance Emission Factor ¹	Monitoring Method Interval	
PM	2.1	See Condition 2.1	0.016 tons/yr	0.30 lb/ton (u)	Recordkeeping, Calculation, and Baghouse Maintenance	See Condition 2.1.
		0.05 g/dscm				
PM ₁₀			0.003 tons/yr	0.15 lb/ton (u)		
Additives Consumption	2.2		4,500 tons/yr	12 lb/mft ² (p)	Recordkeeping and Calculation	Monthly
NSPS General Provisions	2.3				As Required by NSPS General Provisions	Subject to NSPS General Provisions
Opacity	2.4	Not to Exceed 7%			See Condition 2.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(u) = emission factor estimates uncontrolled emissions.

(p) = production rate factor

P010 – Three (3) Crushed Ore Storage Bins, Each Bin w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	2.1	See Condition 2.1.	2.45 tons/yr	0.30 lb/ton (u)	Recordkeeping, Calculation, and Baghouse Maintenance	See Condition 2.1
		0.05 g/dscm				
PM ₁₀			0.56 ton/yr	0.15 lb/ton (u)		
Gypsum Rock Processing	2.2		700,000 tons/yr		Recordkeeping	Monthly
NSPS General Provisions	2.3				As Required by NSPS General Provisions	
Opacity	2.4	Not to Exceed 7%			See Condition 2.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(u) = emission factor estimates uncontrolled emissions.

2.1 PM and PM₁₀ emissions are subject to the following requirements:

2.1.1 PM emissions from Dry Additives Conveying and Crushed Ore Storage shall not exceed the short term emission limitations (lb/hr) defined in Condition 13. In the absence of credible evidence to the contrary, compliance with the short term emission limitations shall be presumed provided the baghouses are operated and maintained in accordance with the provisions in Condition 12.1.

2.1.2 PM and PM₁₀ emissions from Dry Additives Conveying and Crushed Ore Storage shall not exceed the long term emission limitations (tons/yr) identified in the above tables (Colorado Construction Permits 89EA432-2 and 89EA432-9, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limitations shall be monitored by using the above emission factors (U.S. EPA Fire Version 6.22, Source Classification Code 3-05-015-04 for PM₁₀ emissions and assuming PM₁₀ = 50% of PM) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/ton)} \times \text{material processed (tons/mo)}]}{2000 \text{ lb/ton}}$$

Note that a control efficiency of 99% for both PM and PM₁₀ may be applied to the emission calculations provided the baghouses are maintained and operated according to the requirements in Condition 12.1.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 2.1.3 Emissions which contain particulate matter shall not exceed 0.05 g/dscm (40 CFR Part 60 Subpart OOO §§ 60.672(a)(1) and (e)(2), as adopted by reference in Colorado Regulation No. 6, Part A). This particulate matter emission limit applies to both the Dry Additives Conveying and Crushed Ore Storage processes. In the absence of credible evidence to the contrary, compliance with the particulate matter limitations shall be presumed provided the baghouses are operated and maintained in accordance with the requirements in Condition 12.1 and the performance tests conducted as required by Conditions 3.1.3.1 and 5.1.3.1 indicate compliance with the emission limitations in Conditions 3.1.3 and 5.1.3, respectively.
- 2.2 Additives consumption and gypsum rock processed shall not exceed the limitations stated above (Colorado Construction Permits 89EA432-2 and -9, as modified under the provisions of Section I, Condition 1.3).
- 2.2.1 Monthly additive consumption shall be determined by multiplying the monthly wallboard production rate by a factor of 12 lb/mft².
- 2.2.2 Gypsum ore processed in tons per day shall be recorded monthly based on conveyor belt scales. Monthly totals shall be the sum of daily processing rates.
- Monthly processing rates of additives and gypsum rock shall be used in a twelve-month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 2.3 The Dry Additives Conveying System and Crushed Ore Storage are subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these units are subject to the requirements identified in Condition 11.
- 2.4 Opacity of emissions from Dry Additives Conveying and Crushed Ore Storage are subject to the following requirements:
- 2.4.1 Visible emissions discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility shall not exceed 7 % opacity (40 CFR Part 60 Subpart OOO §§ 60.672(a)(2) and (e)(2), as adopted by reference in Colorado Regulation No. 6, Part A). The opacity limitations apply **to each of the vents for the building(s) enclosing these emission points.**

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A).

Note that this opacity requirement is more stringent than the opacity requirements in Conditions 2.4.2 during all times except during startup, shutdown and malfunction.

- 2.4.2 Visible emissions shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during periods of startup, process modifications or adjustment or occasional cleaning of control equipment when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with the opacity limits shall be monitored as follows:

- 2.4.3 In the absence of credible evidence to the contrary, compliance with the opacity limitation is presumed provided the monitoring conducted in accordance with the provisions in Conditions 3.5 and 5.8, indicate compliance.

3. Facility Raw Gypsum Ore Processing Sources, Calcined Ore (Stucco) Storage and Accelerator Mill

P007 - Rock Receiving Station w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	3.1	See Condition 3.1	1.40 tons/yr	0.004 lb/ton (c)	Recordkeeping, Calculation, Baghouse Maintenance, and Performance Test	See Condition 3.1.
		0.05 g/dscm				
PM ₁₀				0.56 tons/yr		
Gypsum Rock Processing	3.2		700,000 tons/yr		Recordkeeping	Monthly
NSPS General Provisions	3.3				As Required by NSPS General Provisions	
Compliance Assurance Monitoring Requirements	3.4				See Condition 3.4.	
Opacity	3.5	Not to Exceed 7%			See Condition 3.5.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(c) = emission factor estimates controlled emissions.

P006 - Crushing Ore w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	3.1	See Condition 3.1.	0.52 tons/year	0.0015 lb/ton (c)	Recordkeeping, Calculation and Baghouse Maintenance, and Performance Test	See Condition 3.1.
		0.05 g/dscm				
PM ₁₀				0.21 tons/year		
Gypsum Rock Processing	3.2		700,000 tons/yr		Recordkeeping	Monthly
NSPS General Provisions	3.3				As Required by NSPS General Provisions	
Opacity	3.5	Not to Exceed 7%			See Condition 3.5.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(c) = emission factor estimates controlled emissions.

P008 - Stucco Storage: Associated Screw Conveyors, Elevators and Vents w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	3.1	See Condition 3.1.	0.9 tons/yr	0.003 lb/ton (c)	Recordkeeping, Calculation, Baghouse Maintenance, and Performance Test	See Condition 3.1.
		0.05 g/dscm				
PM ₁₀				0.9 tons/yr		
Calcined Gypsum Processing	3.2		595,000 tons/yr		Recordkeeping	Monthly
NSPS General Provisions	3.3				As Required by NSPS General Provisions	
Opacity	3.5	Not to Exceed 7%			See Condition 3.5.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(c) = emission factor estimates controlled emissions.

P011 - Accelerator Mill w/Baghouse Control

Parameter	Permit Condition Number	Limitations Short Term Long Term		Compliance Emission Factor	Monitoring Method Interval	
PM	3.1	See Condition 3.1.	0.09 tons/yr	0.05 lb/ton (c)	Recordkeeping, Calculation, Baghouse Maintenance, and Performance Test	See Condition 3.1.
		0.05 g/dscm				
PM ₁₀			0.09 tons/yr	0.05 lb/ton (c)		
Gypsum Rock Processed	3.2		3,750 ton/yr	10 lb/mft ² (p)	Recordkeeping and Calculation	Monthly
NSPS General Provisions	3.3				As Required by NSPS General Provisions	
Opacity	3.5	Not to Exceed 7%			See Condition 3.5.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(c) = emission factor estimates controlled emissions.

(p) = production rate factor

3.1 PM and PM₁₀ Emissions are subject to the following requirements:

3.1.1 PM emissions from Rock Receiving, Crushing, Stucco Storage and the Accelerator Mill shall not exceed the short term emission limitations (lb/hr) defined in Condition 13. In the absence of credible evidence to the contrary, compliance with the short term emission limitations shall be presumed provided the baghouses are operated and maintained in accordance with the provisions in Condition 12.1.

3.1.2 PM and PM₁₀ emissions from Rock Receiving, Crushing, Stucco Storage and the Accelerator Mill shall not exceed the long term emission limitations (tons/yr) identified in the above tables (Colorado Construction Permits 89EA432-5, 6, 7, 10, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limitations shall be monitored by using the above emission factors (from stack testing) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/ton)} \times \text{material processed (tons/mo)}]}{2000 \text{ lb/ton}}$$

Note that the emission factors are for controlled emissions and the baghouses are maintained and operated according to the requirements in Condition 12.1 when using this emission factor.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with

the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 3.1.3 Emissions which contain particulate matter shall not exceed 0.05 g/dscm (40 CFR Part 60 Subpart OOO § 60.672(a)(1), as adopted by reference in Colorado Regulation No. 6, Part A). This limitation **applies to each stack** for the Rock Receiving, Screening and Crushing, Stucco Storage and the Accelerator Mill. Compliance with this limitation shall be monitored as follows:
- 3.1.3.1 Conducting performance tests in accordance with the requirements in Condition 12.2. This test shall also be used to verify the emission factors used to calculate emissions as specified in Condition 3.1.2.
- 3.1.3.2 In the absence of credible evidence to the contrary, at times between performance tests, compliance with the particulate matter limitations shall be presumed provided the baghouses are operated and maintained in accordance the requirements in Condition 12.1.
- 3.2 The tons of gypsum rock or calcined gypsum processed in Rock Receiving, Crushing, Stucco Storage and the Accelerator Mill shall not exceed the limitations listed above (Colorado Construction Permits 89EA432-5, 6, 7, and 10, as modified under the provisions of Section I, Condition 1.3).
- 3.2.1 Gypsum rock or calcined gypsum processed at Rock Receiving, Crushing, or Stucco Storage shall be recorded monthly based on conveyor belt scales. Monthly totals shall be the sum of daily processing rates in tons per day.
- 3.2.2 Monthly gypsum rock processed at the Accelerator Mill shall be determined by multiplying the monthly wallboard production rate by a factor of 10 lb/mft².
- Monthly processing rates shall be used in a twelve-month rolling total to monitor compliance with the ton per year limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 3.3 The Rock Receiving, Crushing, Stucco Storage and the Accelerator Mill processes are subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these units are subject to the requirements identified in Condition 11.
- 3.4 **Rock Receiving only** is subject to the Compliance Assurance Monitoring (CAM) requirements with respect to the PM emission limitations in Conditions 3.1.1, 3.1.2 and 3.1.3. Compliance with the CAM requirements shall be monitored in accordance with the requirements in Condition 14. Note that CAM does not apply to the PM₁₀ emission limitations in Condition 3.1.2.
- 3.5 Opacity of emissions from Rock Receiving, Crushing, Stucco Storage and the Accelerator Mill are subject to the following requirements:

- 3.5.1 Visible emissions shall not exceed 7% opacity (Colorado Construction Permits 89EA432-5, 6, 7 and 10 and 40 CFR Part 60 Subpart OOO § 60.672(b)(2), as adopted by reference in Colorado Regulation No. 6, Part A). Compliance with the opacity limitations shall be monitored by conducting visible emission observations daily. Visible emission observations for non-CAM sources shall be at least thirty seconds in duration. Visible emission observations for Rock Receiving (CAM source) shall be conducted as specified in the CAM plan in Appendix H.

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A).

Note that this opacity requirement is more stringent than the opacity requirements in Conditions 3.5.2 during all times except during startup, shutdown and malfunction.

- 3.5.2 Visible emissions shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during periods of startup, process modifications or adjustment or occasional cleaning of control equipment when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with the opacity limits shall be monitored as follows:

- 3.5.3 If any visible emissions are observed, the permittee shall investigate the baghouse performance and make any repairs or adjustments necessary. A daily log shall be kept of the observations and any action taken as a result and such log shall be made available to the Division upon request. An example log is provided in Appendix G. If, after maintenance has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

If the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required for non-CAM sources for that day.

Note that the CAM plan (Appendix H) for Rock Receiving requires daily visible emission observations. As required by the CAM requirements if any daily observation indicates visible emissions are seen, such observation must be reported as an excursion, as required by the CAM requirements. For CAM sources, if the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required, except that if the visible emission observation is not conducted and no pressure differential is recorded for that day, failure to conduct monitoring for that day must be reported as an excursion.

4. Facility Process Sources Not Subject to NSPS OOO Requirements

P004 - End Trim Reclaim System w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	4.1	See Condition 4.1.	7.5 tons/yr	20 lb/mmft ² (c)	Recordkeeping, Calculation and Baghouse Maintenance	See Condition 4.1.
PM ₁₀			5.6 tons/yr	15 lb/mmft ² (c)		
Wallboard Production	4.2		750 mmft ² /yr		Recordkeeping	Monthly
Compliance Assurance Monitoring Requirements	4.3				See Condition 4.3	
Opacity	4.4	State-Only: Not to Exceed 20%			See Condition 4.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				
NSPS General Provisions – State Only	4.5				As Required by NSPS General Provisions	

(c) = emission factor estimates controlled emissions.

P005 - Paper Creasing, Scoring and Buffing System w/Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	4.1	See Condition 4.1.	0.015 tons/yr	0.04 lb/mmft ² (c)	Recordkeeping, Calculation and Baghouse Maintenance	See Condition 4.1.
PM ₁₀			0.015 tons/yr	0.04 lb/mmft ² (c)		
Wallboard Production	4.2		750 MMft ² /yr		Recordkeeping	Monthly
Opacity	4.4	State-Only: Not to Exceed 20%			See Condition 4.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				
NSPS General Provisions – State Only	4.5				As Required by NSPS General Provisions	

(c) = emission factor estimates controlled emissions.

P021 -Starch Storage Silo with Bin Vent Filter

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	4.1	See Condition 4.1.	0.033 tons/yr	2.2 lb/ton (u)	Recordkeeping, Calculation and Bin Vent Filter Maintenance	See Condition 4.4
PM ₁₀			0.033 tons/yr	2.2 lb/ton (u)		
Starch Processed	4.2		3,000 tons/yr		Recordkeeping and Calculation	Monthly
Opacity	4.4	State-Only: Not to Exceed 20%			See Condition 4.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				
NSPS General Provisions – State Only	4.5				As Required by NSPS General Provisions	

(u) = emission factor estimates uncontrolled emissions.

P022 – Dunnage Cutting Machine with Baghouse

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	4.1	See Condition 4.1.	0.075 tons/yr	7.5 lb/mmft ² (c)	Recordkeeping, Calculation and Bin Vent Filter Maintenance	See Condition 4.1.
PM ₁₀			0.057 tons/yr	5.7 lb/mmft ² (c)		
Wallboard Processed	4.2		20 mmft ²		Recordkeeping	Monthly
Opacity	4.4	State-Only: Not to Exceed 20%			See Condition 4.4.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				
NSPS General Provisions – State Only	4.5				As Required by NSPS General Provisions	

(c) = emission factor estimates controlled emissions.

4.1 PM and PM₁₀ emissions are subject to the following requirements:

4.1.1 PM emissions from End Trim Reclaim, Paper Creasing and Scoring, Starch Storage Silo and the Dunnage Cutting Machine shall not exceed the short term emission limitations (lb/hr) defined in Condition 13. In the absence of credible evidence to the contrary, compliance with the short term emission limitations shall be presumed provided the baghouses for End Trim Reclaim, Paper Creasing and Scoring and the Dunnage Cutting Machine are operated and maintained in accordance with the provisions in Condition 12.1 and the bin vent filter on the Starch Storage Silo is operated and maintained in accordance with the provisions in Condition 12.3.

4.1.2 PM and PM₁₀ emissions from End Trim Reclaim, Paper Creasing and Scoring and the Dunnage Cutting Machine shall not exceed the long term emission limitations (tons/yr) identified in the above tables (Colorado Construction Permits 89EA432-3 and 4 (End-Trim Reclaim and Paper Creasing and Scoring, respectively), as modified under the provisions of Section I, Condition 1.3 and for Dunnage Cutting Machine, as provided for in Section I, Condition 1.3 and Colorado Regulation No. 3, Part A, Section I.B.36.h, and Part C, Section III.B.7). Compliance with the annual limitations shall be monitored by using the above emissions factors (End-Trim Reclaim – stack test, Paper Creasing and Scoring – calculation and Dunnage Cutting Machine – EPA’s Compilation of Emission Factors (AP-42), Section 11.16, dated July 1993 (reformatted January 1995)) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/mmft}^2\text{)} \times \text{material processed (mmft}^2\text{/mo)}]}{2000 \text{ lb/ton}}$$

Note that the emission factors are for controlled emissions and the baghouses are maintained and operated according to the requirements in Condition 12.1 when using this emission factor.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 4.1.3 PM and PM₁₀ emissions from the Starch Storage Silo shall not exceed the long term emission limitations (tons/yr) identified in the above tables (as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section III.A.6 and Part C, Section X, based on the maximum production rate identified in the APEN submitted September 15, 1998). Compliance with the annual limitations shall be monitored by using the above emission factors (EPA's Compilation of Emission Factors (AP-42), dated January 1995, Section 11.17) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/ton)} \times \text{material processed (tons/mo)}]}{2000 \text{ lb/ton}}$$

Note that a control efficiency of 99% for both PM and PM₁₀ may be applied to the emission calculations provided the bin vent filter is maintained and operated according to the requirements in Condition 12.3.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 4.2 Materials processed through the End-Trim Reclaim, Paper Creasing and Scoring, Starch Storage Silo and Dunnage Cutting Machine are subject to the following requirements:

- 4.2.1 Facility Wallboard processed through End Trim Reclaim, Paper Creasing and Scoring and the Dunnage Cutting Machine shall not exceed the limitations stated in the above tables (Colorado Construction Permits 89EA432-3 and 4 (End-Trim Reclaim and Paper Creasing and Scoring, respectively), as modified under the provisions of Section I, Condition 1.3 and for Dunnage Cutting Machine, as provided for in Section I, Condition 1.3 and Colorado Regulation No. 3, Part A, Section I.B.36.h, and Part C, Section III.B.7).

- 4.2.1.1 Wallboard production though End Trim Reclaim and Paper Creasing Scoring shall be determined based upon board line speed. Monthly wallboard production totals shall be a sum of daily production rates determined by multiplying the average daily line speed by the width of the wallboard being manufactured.

- 4.2.1.2 Wallboard processed at the Dunnage Cutting Machine shall be determined based on daily counts of boards processed through the machine. Monthly wallboard processed shall be the sum of the daily board counts.

Monthly production rates shall be used in a twelve-month rolling total to monitor compliance with annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 4.2.2 Quantities of Starch processed through the silo shall not exceed the limitations stated in the above tables (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section III.A.6 and Part C, Section X, based on the maximum production rate identified in the APEN submitted September 15, 1998). Monthly starch processed shall be determined by multiplying the monthly wallboard production rate by a factor of 8 lb/mft². A twelve month rolling total shall be maintained to monitor compliance with the annual limitation.
- 4.3 **End Trim Reclaim only** is subject to the Compliance Assurance Monitoring (CAM) requirements with respect to the PM and PM₁₀ emission limitations in Conditions 4.1.1 and 4.1.2. Compliance with the CAM requirements shall be monitored in accordance with the requirements in Condition 14.
- 4.4 Opacity of Emissions from End-Trim Reclaim, Paper Creasing and Scoring, Starch Storage Silo and the Dunnage Cutting Machine are subject to the following requirements:
- 4.4.1 **State-Only Requirement:** Visible emissions of any particulate matter shall not exceed 20% opacity (Colorado Regulation No. 6, Part B, Section III.C.3). This opacity standard applies to **each stack**.
- This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, Section I.A).
- Note that this opacity requirement is more stringent than the opacity requirement in Condition 4.4.2 during periods of process modifications or adjustment or occasional cleaning of control equipment.
- 4.4.2 Visible emissions shall not exceed 20% opacity (Colorado Construction Permit 89EA432-3 and 4 and Colorado Regulation No. 1, Section II.A.1) except during startup, process modifications or adjustment or occasional cleaning of control equipment when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).
- 4.4.3 Visible Emission observations shall be conducted daily. Visible emission observations for non-CAM sources shall be at least thirty seconds in duration. Visible emissions for End Trim Reclaim (CAM source) shall be conducted as

specified in the CAM plan in Appendix H. If any visible emissions are observed, the permittee shall investigate the baghouse performance and make any repairs or adjustments necessary. A daily log shall be kept of the observations and any action taken as a result and such log shall be made available to the Division upon request. An example log is provided in Appendix G. If, after maintenance has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

If the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required for non-CAM sources for that day.

Note that the CAM plan (Appendix H) for End Trim Reclaim requires daily visible emission observations. As required by the CAM requirements if any daily observation indicates visible emissions are seen, such observation must be reported as an excursion, as required by the CAM requirements. For CAM sources, if the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required, except that if the visible emission observation is not conducted and no pressure differential is recorded for that day, failure to conduct monitoring for that day must be reported as an excursion.

- 4.5 **State Only Requirement:** End-Trim Reclaim, Paper Creasing and Scoring, Starch Storage Silo and the Dunnage Cutting Machine are subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these units are subject to the requirements identified in Condition 11.

5. P012 - Three Impact Mills Each w/ Natural Gas Burners (22.5 MMBTU/hr) and Each w/Baghouse Control

Unless otherwise specified the limits provided in this table are for **all three** impact mills/burners.

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	5.1	See Condition 5.1.	7.35 tons/yr	0.021 lb/ton (c)	Recordkeeping, Calculation, Baghouse Maintenance, and Performance Test	See Condition 5.1.
		For each stack - 0.05 g/dscm				
PM ₁₀				7.35 tons/yr		
NO _x	5.2		33.8 tons/yr	100 lb/MMscf	Recordkeeping and Calculation	Monthly
CO			28.4 tons/yr	84 lb/MMscf		
Gypsum Rock Consumption	5.3		700,000 tons/yr		Recordkeeping	Monthly
Natural Gas Consumption	5.4		675 MMscf/yr		Fuel Meters	Monthly
SO ₂ - State-Only	5.5	2 tons/day OR Utilize Best Practical Control Technology			Fuel Restriction	Only Natural Gas is Used as Fuel
NSPS General Provisions	5.6				As Required by NSPS General Provisions	
Compliance Assurance Monitoring	5.7				See Condition 5.7.	
Opacity - for Each Mill	5.8	Not to Exceed 7%			See Condition 5.8.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(c) = emission factor estimates controlled emissions

5.1 PM and PM₁₀ emission are subject to the following requirements:

5.1.1 PM emissions **from each stack** for the impact mills shall not exceed the short term emission limitation (lb/hr) defined in Condition 13. In the absence of credible evidence to the contrary, compliance with the short term emission limitations shall be presumed provided the baghouses are operated and maintained in accordance with the provisions in Condition 12.1.

- 5.1.2 PM and PM₁₀ emissions from the impact mills shall not exceed the long term emission limitations (tons/yr) identified in the above table (Colorado Construction Permit 89EA432-11, as modified under the provisions of Section I, Condition 1.3). Compliance with the annual limitations shall be monitored by using the above emission factors (from stack test) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/ton)} \times \text{material processed (tons/mo)}]}{2000 \text{ lb/ton}}$$

Note that the emission factors are for controlled emissions and the baghouses are maintained and operated according to the requirements in Condition 12.1 when using this emission factor.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 5.1.3 Emissions which contain particulate matter shall not exceed 0.05 g/dscm (40 CFR Part 60 Subpart OOO § 60.672(a)(1), as adopted by reference in Colorado Regulation No. 6, Part A). This limitation **applies to each stack** for the impact mills. Compliance with this limitation shall be monitored as follows:
- 5.1.3.1 Conducting performance tests in accordance with the requirements in Condition 12.2. This test shall also be used to verify the emission factors used to calculate emissions as specified in Condition 5.1.2.
- 5.1.3.2 In the absence of credible evidence to the contrary, at times between performance tests, compliance with the particulate matter limitations shall be presumed provided the baghouses are operated and maintained in accordance the requirements in Condition 12.1.
- 5.2 **Total** Emissions of NO_x, and CO, **from all impact mills**, shall not exceed the limitations listed above (Colorado Construction Permit 89EA432-12, as modified under the provisions of Section I, Condition 1.3 based on the revised emission limits indicated on the APEN submitted on November 27, 2002). Monthly emissions from all impact mills shall be calculated by the end of the subsequent month using the above emission factors (EF) (from "EPA's Compilation of Emission Factors (AP-42)", Section 1.4 (dated 3/98)) and the monthly natural gas consumption, as required by Condition 5.4 in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/MMscf)} \times \text{monthly natural gas use (MMscf/mo)}]}{2000 \text{ lb/ton}}$$

Monthly emissions **from all impact mills** together shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 5.3 The **total** quantity of ore processed in the impact mills shall not exceed the limitation stated above (Colorado Construction Permit 89EA432-11, as modified under the provisions of Section

I, Condition 1.3). The quantity of ore processed in tons per day shall be recorded monthly based on conveyor belt scales. Monthly totals shall be a sum of daily processing rates. Total monthly processing rates shall be used in a twelve-month rolling total to monitor compliance with the ton per year limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 5.4 **Total** natural gas consumption for the impact mills shall not exceed the limitations stated above (Colorado Construction Permit 89EA432-11, as modified under the provisions of Section I, Condition 1.3). On the first working day of each month, impact mill natural gas consumption shall be determined using the fuel meter shared by the impact mills and wallboard dryers. Natural gas consumed by the impact mills is assumed to be 50% of the total natural gas consumption recorded by the shared fuel meter. A twelve month rolling total shall be maintained to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculate using the previous twelve months data.

- 5.5 **State-Only Requirement:** The following SO₂ requirements apply:

5.5.1 Emissions of SO₂ shall not exceed 2 tons/day (Colorado Regulation No. 6, Part B, Section III.D.1) **OR**

5.5.2 The permittee shall utilize best practical control technology for control of sulfur dioxide (Colorado Regulation No.6, Part B, Section III.D.2).

In the absence of credible evidence to the contrary, compliance with the above SO₂ limitations is presumed since only natural gas is permitted to be used as fuel.

- 5.6 These Impact Mills are subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these units are subject to the requirements identified in Condition 11.

- 5.7 These Impact Mills are subject to the Compliance Assurance Monitoring (CAM) requirements with respect to the PM and PM₁₀ emission limitations in Conditions 5.1.1, 5.1.2 and 5.1.3. Compliance with the CAM requirements shall be monitored in accordance with the requirements in Condition 14.

- 5.8 Opacity of emissions from the Imp Mills are subject to the following requirements:

5.8.1 Visible emissions shall not exceed 7% opacity (Colorado Construction Permits 89EA432-5, 6, 7 and 10 and 40 CFR Part 60 Subpart OOO § 60.672(a)(2), as adopted by reference in Colorado Regulation No. 6, Part A). Compliance with the opacity limitations shall be monitored by conducting visible emission observations daily as specified in the CAM plan in Appendix H.

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A).

Note that this opacity requirement is more stringent than the opacity requirements in Conditions 5.8.2 during all times except during startup, shutdown and malfunction.

- 5.8.2 Visible emissions shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during periods of adjustment or occasional cleaning of control equipment when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with the opacity limits shall be monitored as follows:

- 5.8.3 If any visible emissions are observed, the permittee shall investigate the baghouse performance and make any repairs or adjustments necessary. A daily log shall be kept of the observations and any action taken as a result and such log shall be made available to the Division upon request. An example log is provided in Appendix G. If, after maintenance has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation, with the additional procedures listed in §60.675(c)(1), shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

If the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required for non-CAM sources for that day.

Note that the CAM plan (Appendix H) for the Imp Mills requires daily visible emission observations. As required by the CAM requirements if any daily observation indicates visible emissions are seen, such observation must be reported as an excursion, as required by the CAM requirements. For CAM sources, if the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required, except that if the visible emission observation is not conducted and no pressure differential is recorded for that day, failure to conduct monitoring for that day must be reported as an excursion.

6. P015 - 4 Zone, 10 Deck Wallboard Dryer (35 MMBTU/hr Burner each Zone)

Unless otherwise specified the limits provided in this table are for **all four dryer zones**.

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM – for Each Stack	6.1	0.198 lb/MMBtu			Fuel Restriction	Only Natural Gas is Used as Fuel
NO _x	6.2		33.8 tons/yr	100 lb/MMscf	Recordkeeping and Calculation	Monthly
CO			28.4 tons/yr	84 lb/MMscf		
Natural Gas Consumption	6.3		675 MMscf/yr		Fuel Meters	Monthly
NSPS General Provisions - State-Only	6.4				As Required by NSPS General Provisions	
Opacity – for Each Stack	6.5	Not to Exceed 20% Except as Provided for Below			Fuel Restriction	Only Natural Gas is Used as Fuel
		For Startup – Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes				

- 6.1 Particulate Matter (PM) emissions **from each zone/stack** shall not exceed the above limitations (Colorado Regulation No. 1, Section III.A.1). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed since only natural gas is permitted to be used as fuel in the turbines.

The numeric PM standards were determined using the design heat input for each dryer zone (35 MMBtu/hr) in the following equation:

$$PE = 0.5 \times (FI)^{-0.26}, \quad \text{where:} \quad \begin{array}{l} PE = \text{particulate standard in lb/MMBtu} \\ FI = \text{fuel input in MMBtu/hr} \end{array}$$

- 6.2 **Total** Emissions of NO_x, and CO, **from all zones**, shall not exceed the limitations listed above (Colorado Construction Permit 89EA432-12, as modified under the provisions of Section I, Condition 1.3 based on the revised emission limits indicated on the APEN submitted on November 27, 2002). Monthly emissions from all dryer zones shall be calculated by the end of the subsequent month using the above emission factors (EF) (from “EPA’s Compilation of Emission Factors (AP-42)”, Section 1.4 (dated 3/98)) and the monthly natural gas consumption, as required by Condition 6.3 in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/MMscf)} \times \text{monthly natural gas consumption (MMscf/mo)}]}{2000 \text{ lb/ton}}$$

Monthly emissions from all zones together shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 6.3 **Total** natural gas consumption **for all zones** shall not exceed the limitations stated above (Colorado Construction Permit 89EA432-12, as modified under the provisions of Section I, Condition 1.3). On the first working day of each month, natural gas consumption shall be determined using the fuel meter shared by the impact mills and wallboard dryers. Natural gas consumed by the wallboard dryers is assumed to be 50% of the total natural gas consumption recorded by the shared fuel meter. A twelve month rolling total shall be maintained to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 6.4 **State-Only Requirement:** The wallboard dryer is subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, these dryers are subject to the requirements identified in Condition 11.
- 6.5 Visible emissions shall not exceed 20% opacity (Colorado Construction Permit 89EA432-12 and Colorado Regulation No. 1, Section II.A.1) except during start-up when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity standard applies to **each zone/stack**. In the absence of credible evidence to the contrary, compliance with the opacity limit shall be presumed since only natural gas is permitted to be used as fuel for this unit.

7. P018 - Two Detroit Diesel Internal Combustion Engines Powering Emergency Generators (2010 HP)

Unless otherwise specified the limits provided in this table are for **both** generators.

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor (lb/MMBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
NO _x	7.1		24.2 tons/yr	3.2	Recordkeeping and Calculation	Monthly
CO			6.4 tons/yr	0.85		
SO ₂	7.2	0.8 lb/MMBtu - for each generator		1.01S	Fuel Restriction	See Condition 7.2.
Hours of Operation	7.3				Recordkeeping	Monthly
Diesel Fuel Use	7.4		112,000 gal/yr		Recordkeeping	Monthly
Fuel Sampling	7.5				ASTM Methods	For Each Shipment of Fuel
Opacity - for Each Generator	7.6	Not to Exceed 20% Except as Provided for Below			EPA Method 9	See Condition 7.6.
		For Startup – Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes				
NESHAP Subpart ZZZZ	7.7	See Condition 7.7			See Condition 7.7	
NESHAP General Provisions	7.8				As required in 40 CFR 63 Subpart A	

S = weight percent sulfur in fuel

- 7.1 **Total** emissions of NO_x and CO from **both generator engines** shall not exceed the limitations stated above (Colorado Construction Permit 89EA432-13, as modified under the provisions of Section I, Condition 1.3, to revise the emission limitations as requested on the APEN submitted on January 14, 2004). Monthly emissions from both engines shall be calculated by the end of the subsequent month using the above emission factors (EF) (from “EPA’s Compilation of Emission Factors (AP-42)”, Section 3.4 (dated 10/96)) and the monthly fuel consumption, as required by Condition 7.4 in the following equation:

$$\text{Tons/Month} = \frac{\text{EF (lb/MMBtu)} \times \text{Fuel Use (gals/month)} \times \text{Heat Content of Diesel Fuel (MMBtu/gal)}}{2000 \text{ lb/ton}}$$

Monthly emissions from each engine shall be summed and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 7.2 Emissions of SO₂ **from each engine** shall not exceed the limitation stated above (Colorado Regulation No. 1, Section VI.B.4.b.(i)). In the absence of credible evidence to the contrary, compliance with the above SO₂ limitation shall be presumed provided the fuel sampling required by Condition 7.5 demonstrates that the fuel has sulfur content no greater than 0.79% by weight.
- 7.3 Hours of operation shall be recorded monthly and used to determine monthly fuel consumption for the engines as required by Condition 7.4.
- 7.4 Number 2 Diesel Fuel oil shall be used as the sole fuel in these engines. Consumption of No. 2 Diesel Fuel oil shall not exceed the limitation stated above (Colorado Construction Permit 89EA432-13, as modified under the provisions of Section I, Condition 1.3, to revise the fuel consumption limit as indicated on the APEN submitted on January 14, 2004). The gallons of fuel burned shall be determined monthly using the following equation:

$$\text{Gallons/month} = \frac{14.6 \text{ MMBtu/hr} \times \text{Total Hours of Operation for Both Engines (hrs/month)}}{\text{Heat Content of Fuel (MMBtu/gal)}}$$

Heat Content shall be the value determined as required under Condition 7.5 of this permit.

A twelve month rolling total of fuel use will be maintained to verify compliance with the gallon/year limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 7.5 Diesel fuel shall be sampled to determine the heat content and weight percent sulfur of the fuel. Each shipment of fuel shall be sampled and analyzed using appropriate ASTM methods, or equivalent, if approved in advance by the Division. In lieu of sampling, vendor data may be used to determine the heat content and weight percent sulfur provided sampling and analysis was performed using the appropriate ASTM methods. Records of sampling results or vendor data shall be made available to the Division for review upon request.

If after the first year following renewal permit issuance date the heat content value of the fuel has not varied by more than 5%, the average heat value shall be determined and used to calculate emissions (Condition 7.1) and to determine fuel consumption (Condition 7.4) for the remainder of the permit term and the sampling requirements of this Condition 7.5 are no longer applicable.

- 7.6 Visible emission shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during startup when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This opacity limitation applies to **each** emergency generator.

Compliance with these limitations shall be monitored by conducting visual emission observations in accordance with EPA Reference Method 9 as follows:

- 7.6.1 An engine startup period of less than 60 minutes shall not require a startup opacity observation. If the engine startup period is greater than 60 minutes, one opacity observation shall be made for each consecutive 4 hour period of startup during

daylight hours. In addition, a record shall be kept of the date and time the engine started and when it was shutdown.

7.6.2 Continued operation of the engine after the completion of the startup period shall require monthly opacity observations. If the startup and operation is for a routine exercise of engine/generator unit that lasts less than a total of 4 hours from engine start to engine stop, in any one day no opacity observations are required.

7.6.3 All opacity observations shall be performed by an observer with current and valid Method 9 certification.

7.7 **[Federal – Only]** These engines are subject to the requirements in 40 CFR Part 63 Subpart ZZZZ, “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines”, as follows:

These requirements included in this Condition 7.7 are only federally enforceable. As of the date of revised permit issuance [January 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable.

When do I have to comply with this subpart (§ 60.6595)

7.7.1 If you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. (§ 63.6595(a)(1))

What emission limitations and operating limitations must I meet if I own or operate an existing CI RICE located at an area source of HAP emissions (§ 63.6603)

7.7.2 If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart which apply to you. (§ 63.6603(a)) The requirements in Table 2d that apply to these emergency CI RICE are as follows:

7.7.2.1 Change oil and filter every 500 hours of operation or annually whichever comes first. (Table 2d, item 4.a)

7.7.2.2 Inspect air cleaner every 1,000 hours of operation or annually whichever comes first. (Table 2d, item 4.b)

7.7.2.3 Inspect all hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary. (Table 2d, item 4.c)

Notwithstanding the above requirements, the following applies:

7.7.2.4 Sources have the option to utilize an oil analysis program as described in Condition 7.7.8 in order to extend the specified oil change requirement in

Condition 7.7.2.1. (Table 2d, footnote 1)

- 7.7.2.5 If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Conditions 7.7.2.1 through 7.7.2.3, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (Table 2d, footnote 2)

What are my general requirements for complying with this subpart? (§ 63.6605)

- 7.7.3 You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (§ 63.6605(a))
- 7.7.4 At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§ 63.6605(b))

What are my monitoring, installation, collection, operation, and maintenance requirements? (§ 63.6625)

- 7.7.5 If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (§ 63.6625(e))
- 7.7.6 If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an

existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. (§ 63.6625(f))

- 7.7.7 If you operate a new or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. (§ 63.6625(h))
- 7.7.8 If you own or operate a stationary engine that is subject to the work, operation or management practices in Condition 7.7.2.1, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 7.7.2.1. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 7.7.2.1. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil before continuing to use the engine. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (§ 63.6625(i))

How do I demonstrate continuous compliance with the emission limitations and operating limitations? (§ 63.6640)

- 7.7.9 If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the engine according to the conditions described below. (§ 63.6640(f))
- 7.7.9.1 For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. (§ 63.6640(f)(1))
- 7.7.9.2 There is no time limit on the use of emergency stationary RICE in emergency situations. (§ 63.6640(f)(2))
- 7.7.9.3 You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the

vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. (§ 63.6640(f)(3))

- 7.7.9.4 You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this Condition 7.7.9.4, as long as the power provided by the financial arrangement is limited to emergency power. (§ 63.6640(f)(4))

What records must I keep? (§ 63.6655)

- 7.7.10 You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Conditions 7.7.2.1 through 7.7.2.3. (§ 63.6655(e) and § 63.6655(e)(3))
- 7.7.11 If you own or operate an existing emergency stationary CI RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what

classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. (§ 63.6655(f) and § 63.6655(f)(2))

7.8 **[Federal – Only]** This engine is subject to the requirements in 40 CFR part 63 Subpart A “General Provisions”, as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:

7.8.1 Prohibited activities in § 63.4(a).

7.8.2 Circumvention in § 63.4(b)

8. P020 - Waste Reclaim System (Crusher, Hopper and Conveyors) w/ Baghouse Control

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	8.1	See Condition 8.1.	3.71 tons/yr	2.32 lb/ton (u)	Recordkeeping, Calculation and Baghouse Maintenance	See Condition 8.1.
		0.05 g/dscm				
PM ₁₀				2.09 tons/yr		
Recycled Wallboard Processing	8.2		80,000 tons/yr		Recordkeeping	Monthly
NSPS General Provisions	8.3				As Required by NSPS General Provisions	
Opacity	8.4	Not to Exceed 7%			See Condition 8.5.	
		Not to Exceed 20% Except as Provided for Below				
		For Certain Operational Activities - Not to Exceed 30% for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes				

(u) = emission factor estimates uncontrolled emissions.

8.1 PM and PM₁₀ emissions are subject to the following requirements:

8.1.1 PM emissions from the Waste Reclaim System shall not exceed the short term emission limitations (lb/hr) defined in Condition 13. In the absence of credible evidence to the contrary, compliance with the short term emission limitations shall be presumed provided the baghouse is operated and maintained in accordance with the provisions in Condition 12.1.

- 8.1.2 PM and PM₁₀ emissions from the Waste Reclaim System shall not exceed the long term emission limitations (tons/yr) identified in the above tables (Colorado Construction Permits 94EA540, as modified under the provisions of Section I, Condition 1.3 based on the revised emission limits indicated on the APEN submitted on November 27, 2002). Compliance with the annual limitations shall be monitored by using the above emission factors (U.S. EPA Fire Version 6.22, Source Classification Code 3-05-015-04 and 3-05-015-05 for PM₁₀ emissions and assuming PM₁₀ = 50% of PM) in the following equation:

$$\text{Tons/mo} = \frac{[\text{EF (lb/ton)} \times \text{material processed (tons/mo)}]}{2000 \text{ lb/ton}}$$

Note that a control efficiency of 96 % for PM and 95.5% for PM₁₀ may be applied to the emission calculations provided the baghouse is maintained and operated according to the requirements in Condition 12.1.

Monthly emissions shall be calculated by the end of the subsequent month. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 8.1.3 Emissions which contain particulate matter shall not exceed 0.05 g/dscm (40 CFR Part 60 Subpart OOO § 60.672(a)(1), as adopted by reference in Colorado Regulation No. 6, Part A). This limitation applies to each vent on the Waste Reclaim building. Compliance with this limitation shall be monitored as follows:

8.1.3.1 Conducting performance tests in accordance with the requirements in Condition 12.2. This test shall also be used to verify the emission factors used to calculate emissions as specified in Condition 8.1.2.

8.1.3.2 In the absence of credible evidence to the contrary, at times between performance tests, compliance with the particulate matter limitations shall be presumed provided the baghouses are operated and maintained in accordance the requirements in Condition 12.1.

- 8.2 Recycled wallboard processing shall not exceed the limitations stated above (Colorado Construction Permit 94EA540, as modified under the provisions of Section I, Condition 1.3). The quantity of wallboard sent to the recycling process shall be recorded monthly based on board counts (full sheets) and loader bucket counts (broken pieces). Monthly totals shall be the sum of daily board and loader bucket counts. Total boards and broken pieces will be converted to tons/yr based on standard board densities. Tons per month shall be used in a rolling twelve-month total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 8.3 The Waste Reclaim System is subject to the requirements in 40 CFR Part 60, Subpart A – General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A, Subpart A. Specifically, the waste reclaim system is subject to the requirements identified in Condition 11.

8.4 Opacity of Emissions from the Waste Reclaim System is subject to the following requirements:

- 8.4.1 Visible emissions shall not exceed 7% opacity (Colorado Construction Permit 94EA540 and 40 CFR Part 60 Subpart OOO § 60.672(b)(2), as adopted by reference in Colorado Regulation No. 6, Part A). This limitation applies to each vent on the Waste Reclaim building.

This opacity standard applies at all times except during periods of startup, shutdown and malfunction (40 CFR Part 60 Subpart A § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A).

Note that this opacity requirement is more stringent than the opacity requirements in Conditions 8.4.2 during all times except during startup, shutdown and malfunction.

- 8.4.2 Visible emissions shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during adjustment or occasional cleaning of control equipment when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). This limitation applies to each vent on the Waste Reclaim building.

- 8.4.3 Visible emission observations shall be conducted daily on **each** vent in the Waste Reclaim System. Visible emission observations shall be at least thirty seconds in duration. If any visible emissions are observed, the permittee shall investigate the baghouse performance and make any repairs or adjustments necessary. A daily log shall be kept of the observations and any action taken as a result and such log shall be made available to the Division upon request. An example log is provided in Appendix G. If, after maintenance has been performed, visible emissions persist for longer than one hour, an EPA Reference Method 9 opacity observation shall be performed to determine compliance with the opacity standard. The EPA Reference Method 9 opacity observations shall be performed by an observer with current and valid Method 9 certification.

If the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required for that day.

9. P023 – Gypsum Mineral Mining Operation Fugitive Emissions

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	9.1		173.2 tons/yr		Recordkeeping and Calculation	See Condition 9.1
PM ₁₀			72.6 tons/yr			
Gypsum Mineral Production	9.2		800,000 ton/yr		Recordkeeping and Calculation	Monthly
Control Measures	9.3	See Condition 9.3			Recordkeeping	As Needed
Opacity	9.4	See Condition 9.4			See Condition 9.4	

- 9.1 PM and PM₁₀ emissions from the gypsum mine shall not exceed the long term emission limitations (tons/yr) identified in the above tables (Colorado Construction Permit 84EA192-3F, as modified under the provisions of Section I, Condition 1.3). In the absence of credible evidence to the contrary, compliance with the particulate matter limitations shall be presumed provided the gypsum mine is in compliance with gypsum mineral production limitation and control measures in accordance the requirements in Conditions 9.2 and 9.3.
- 9.2 The tons of gypsum mineral produced at the mine shall not exceed the limitations listed above (Colorado Construction Permit 84EA192-3F, as modified under the provisions of Section I, Condition 1.3). Monthly records of the actual production rate shall be maintained and made available to the Division for inspection upon request. (Colorado Construction Permit 84EA192-3F, as modified under the provisions of Section I, Condition 1.3). Monthly totals shall be summed and used in a twelve-month rolling total to monitor compliance with the ton per year limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 9.3 The following Particulate Emissions Control Plan, set forth in Construction Permit 84EA192-3F, shall be followed:
- 9.3.1 Adequate soil moisture must be maintained in topsoil and overburden to control emissions during removal. Watering should be implemented if necessary.
- 9.3.2 Topsoil and overburden stockpiles shall be compacted and revegetated within one year. Side slopes of overburden stockpiles shall be enclosed by a natural gulch.
- 9.3.3 Sequential blasting shall be used.
- 9.3.4 Emissions from material handling (i.e. removal, loading and hauling) shall be controlled by watering at all times unless natural moisture is sufficient to control emissions.
- 9.3.5 Vehicle speed on unpaved roads and disturbed areas shall not exceed a maximum of 30 mph and average vehicle speed shall not exceed 20 mph. Speed limit signs shall

- be posted. Unpaved haul roads shall be watered as often as need to control fugitive particulate emissions.
- 9.3.6 Reclamations works and sequential extraction of material shall be initiated to keep the total disturbed areas at any one time to a minimum.
- 9.3.7 Haul trucks shall be equipped with and use covers in order to meet the emissions guideline for haul trucks listed in Condition 9.1.
- 9.4 The guidelines regarding visible emissions, set forth in Construction Permit 84EA192-3F, shall be followed (Colorado Regulation No. 1 Section III.D). The following are guidelines and not enforceable standards and no person shall be cited for violation thereof pursuant to C.R.S. 1973, 25-7-115 as amended:
- 9.4.1 Mining Activities – Visible emissions shall not exceed 20% and no off-property transport of visible emissions shall occur.
- 9.4.2 Haul Roads – No off-property transport of visible emissions shall apply to on-site haul roads, the nuisance guidelines shall apply to off-site haul roads.
- 9.4.3 Haul Trucks – There shall be no off-property transport of visible from haul trucks when operating on the facility property. There shall be no off-vehicle transport of visible emissions from the material in the haul trucks when operating off of the facility property.

Compliance with the opacity limits shall be monitored as follows:

- 9.4.4 Within 180 days after the issuance of this permit, a Method 22 shall be conducted to demonstrate compliance with the opacity limitations above. This test shall be performed at the leeward property line of the mine facility while mining operations are occurring.
- 9.4.5 After the initial opacity observation, compliance with the opacity standard shall be presumed provided the particulate emissions control plan as required by Condition 9.3 is followed.

10. P025 – Cummins diesel fired reciprocating internal combustion engine (207 HP)

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor (lb/MMBtu)	Monitoring	
		Short Term	Long Term		Method	Interval
NO _x	10.1		13.1 tons/yr	4.41	Recordkeeping and Calculation	Monthly
SO ₂	10.2	0.8 lb/MMBtu		1.01S	Fuel Restriction	See Condition 10.1
Diesel Fuel Use	10.3		96,360 gal/yr		Recordkeeping	Monthly
Fuel Sampling	10.4	<0.05% sulfur by weight			ASTM Methods	For Each Shipment of Fuel
Opacity	10.5	Not to Exceed 20% Except as Provided for Below			EPA Method 9	See Condition 10.5
		For Startup – Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes				
NESHAP Subpart ZZZZ	10.6	Regular Maintenance and Inspections			See Condition 10.6	
NESHAP General Provisions	10.7				As required by 40 CFR 63 Subpart A	

S = weight percent sulfur in fuel

- 10.1 Emissions of Nitrogen Oxides (NO_x) shall not exceed the limitation stated above (Colorado Construction Permit 02EA0239). Monthly emissions shall be calculated by the end of the subsequent month using the above emission factors (EF) (from “EPA’s Compilation of Emission Factors (AP-42)”, Section 3.3 (dated 10/96)) and the monthly fuel consumption, as required by Condition 10.3 in the following equation:

$$\text{Tons/Month} = \frac{\text{EF (lb/MMBtu)} \times \text{Fuel Use (gals/month)} \times \text{Heat Content of Diesel Fuel (MMBtu/gal)}}{2000 \text{ lb/ton}}$$

Monthly emissions from each engine shall be summed and used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 10.2 Emissions of SO₂ shall not exceed the limitation stated above (Colorado Regulation No. 1, Section VI.B.4.b.(i)). In the absence of credible evidence to the contrary, compliance with the above SO₂ limitation shall be presumed provided the fuel sampling requirements in Condition 10.4 are met (Colorado Construction Permit 02EA0239).

- 10.3 Consumption of fuel shall not exceed the limitation stated above (Colorado Construction Permit 02EA0239, as modified under the provisions of Section I, Condition 1.3). The gallons of fuel burned shall be determined monthly using the following equation:

$$\text{Gallons/month} = \text{Input rate (gal/hr)} \times \text{Total Hours of Operation (hr/month)}$$

A twelve month rolling total of fuel use will be maintained to verify compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data. Annual records of the actual consumption shall be maintained and made available to the Division upon request. (Colorado Regulation No. 3, Part B, Section III.A.4)

- 10.4 The sulfur content of the diesel fuel shall not exceed 0.05% by weight. Diesel fuel shall be sampled to determine the weight percent sulfur of the fuel. Each shipment of fuel shall be sampled and analyzed using appropriate ASTM methods, or equivalent, if approved in advance by the Division.

The heat content of the fuel shall be determined for calculation of annual emissions as required by Condition 10.1. One shipment shall be sampled annually and analyzed using appropriate ASTM methods, or equivalent, if approved in advance by the Division.

In lieu of sampling, vendor data may be used to determine the heat content and weight percent sulfur provided sampling and analysis was performed using the appropriate ASTM methods. Records of sampling results or vendor data shall be made available to the Division for review upon request.

- 10.5 Visible emission shall not exceed 20% opacity (Colorado Regulation No. 1, Section II.A.1) except during startup when visible emissions shall not exceed 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4). Compliance with these limitations shall be monitored by conducting semi-annual visual emission observations in accordance with EPA Reference Method 9. All opacity observations shall be performed by an observer with current and valid Method 9 certification.

- 10.6 **[Federal-Only]** This engine is subject to the requirements in 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), as follows:

These requirements included in this Condition 10.6 are only federally enforceable. As of the date of revised permit issuance [January 1, 2012], the requirements in 40 CFR Part 63 Subpart ZZZZ promulgated on August 20, 2010 have not been adopted into Colorado Regulation No. 8, Part E by the Division and are therefore not state-enforceable.

- 10.6.1 This facility must comply with the applicable operating limitations no later than May 3, 2013. (§63.6595(a)(1))

Operational Requirements

- 10.6.2 The following requirements apply to each non-emergency, non-black start compression ignition stationary RICE ≤ 300 HP: (40 CFR Part 63 Subpart ZZZZ Table 2d)
- 10.6.2.1 Change oil and filter every 1,000 hours of operation or annually, whichever comes first (Table 2d, item 1.a)
- a. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Condition 10.6.2.1. (Table 2d, footnote 1)
- 10.6.2.2 Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first (Table 2d, item 1.b)
- 10.6.2.3 Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary (Table 2d, item 1.c)
- 10.6.2.4 During periods of startup minimize the engine's time spent idle and minimize the engine's startup time at startup to a period need for appropriate and safe loading of the engine, not to exceed 30 minutes. (Table 2d)
- 10.6.2.5 If this engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. (Table 2d, footnote 2)
- 10.6.3 Operate and maintain the engine according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (§63.6625(e)(4))

General Requirements

- 10.6.4 Compliance with the emission limitations and operating limitations in this subpart must be achieved at all times. (§63.6605(a))
- 10.6.5 At all times the engines must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if

levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (§63.6605(b))

Continuous Compliance Requirements

10.6.6 Demonstrate continuous compliance with the operating limitations in Condition 10.6.2 using the work and management practices described in Condition 10.6.3. (§63.6640(a))

10.6.7 Report each instance in which the maintenance requirements of Condition 10.6.2 were not met. These instances are deviations and must be reported according to the requirements of §63.6650. (§63.6640(b))

Notifications and Records

10.6.8 Keep records of the maintenance conducted on the engine in order to demonstrate that the engine was operated and maintained according to the maintenance plan. (§66.6655(e)).

10.7 **[Federal – Only]** This engine is subject to the requirements in 40 CFR part 63 Subpart A “General Provisions”, as adopted by reference in Colorado Regulation No. 8, Part E, Section I as specified in 40 CFR Part 63 Subpart ZZZZ § 63.6665. These requirements include, but are not limited to the following:

10.7.1 Prohibited activities in § 63.4(a).

10.7.2 Circumvention in § 63.4(b)

11. NSPS General Provisions

11.1 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (40 CFR 60 Subpart A § 60.12, as adopted by reference in Colorado Regulation No. 6, Parts A, Subpart A and B, Section I.A).

11.2 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and

maintenance procedures, and inspection of the source (40 CFR Subpart A § 60.11(d), as adopted by reference in Colorado Regulation No. 6, Parts A, Subparts A and B, Section I.A).

- 11.3 Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative (40 CFR Part 60 Subpart A § 60.7(b), as adopted by reference in Colorado Regulation No. 6, Parts A, Subparts A and B, Section I.A).

12. Particulate Matter Emission Periodic Monitoring Requirements

12.1 Baghouse Maintenance Requirements

- 12.1.1 The pressure differential shall be read and recorded daily. Any maintenance taken as a result of such reading shall be recorded in a log such as the example log provided in Appendix G. The log shall be made available to the Division upon request.

Note: If the process is not in operation at the time the daily baghouse inspections are conducted, the pressure drop need not be recorded for non-CAM sources for that day.

- 12.1.2 Routine maintenance of baghouses shall be conducted in accordance with manufacturer's specifications. These specifications shall be in written format. Any maintenance (routine or otherwise) shall be recorded in a log. The log shall be made available to the Division upon request.

- 12.1.3 The baghouses shall be internally inspected for bag integrity and overall mechanical efficiency semi-annually. Powdered dye tests shall be performed as necessary to identify faulty bags. Necessary repairs shall be made prior to bringing the equipment back on line. An adequate inventory of replacement bags and parts shall be maintained on site.

12.2 Stack Testing

- 12.2.1 Performance testing for particulate emissions, as required by Conditions 3.1.3.1, 5.1.3.1 and 8.1.3.1 shall be performed once every five years, in accordance with the requirements and procedures set forth in EPA Test Methods 5 or 17 as set forth in 40 CFR Part 60, Appendix A and the provisions in 40 CFR Part 60 Subpart OOO § 60.675.

- 12.2.2 Performance testing for NO_x emissions, as required by Condition 1.3.1.2 shall be performed once every five years, in accordance with the requirements and procedures set forth in EPA Test Method 20 as set forth in 40 CFR Part 60, Appendix A and the provisions in 40 CFR Part 60 Subpart GG § 60.335.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of the test required under this condition. No stack test required

herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date(s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

12.3 Bin Vent Filter Maintenance Requirements

Routine Maintenance of the bin vent filter shall be conducted in accordance with manufacturer's specifications. These specifications shall be in written format and shall be made available to the Division upon request. A log shall be kept of any maintenance activity performed on this filter and shall be made available on request.

13. Short-Term Particulate Matter Emission Standards

Short term emissions of particulate matter (PM) shall not exceed the following limitations (Colorado Regulation No. 1, Section III.C.1.a & b):

$$PE = 3.59(P)^{0.62}, \text{ for equipment with process weight rates } \leq 30 \text{ tons/hr or}$$
$$PE = 17.31(P)^{0.16}, \text{ for equipment with process weight rates } > 30 \text{ tons/hr}$$

Where: PE = particulate emission rate in lb/hr
P = process weight rate in tons/hr

14. Compliance Assurance Monitoring (CAM) Requirements

14.1 The Compliance Assurance Monitoring (CAM) requirements in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV, apply to the End-Trim Reclaim (P004), Rock Receiving (P007), the Impact Mills (P012) and the as indicated in Conditions 4.3, 3.4 and 5.7, respectively, as follows:

14.1.1 The permittee shall follow the CAM Plan provided in Appendix H of this permit. Excursions, for purposes of reporting are any visible opacity emissions from the emission unit stacks, any instance when a daily baghouse pressure reading is either above 6 inches or below 1 inch of water or any day in which no monitoring was conducted (i.e. no visible emission observation conducted and no pressure differential recorded) for an emission unit. Excursions shall be reported as required by Section IV, Conditions 21 and 22.d of this permit.

14.1.2 Operation of Approved Monitoring

14.1.2.1 At all times, the owner or operator shall maintain the monitoring,

including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment (40 CFR Part 64 § 64.7(b), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.2.2 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR Part 64 § 64.7(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.2.3 Response to excursions or exceedances

- a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable (40 CFR Part 64 § 64.7(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture

system, and the process (40 CFR Part 64 § 64.7(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.2.4 After approval of the monitoring required under the CAM requirements, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Division and, if necessary submit a proposed modification for this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters (40 CFR Part 64 § 64.7(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.3 Quality Improvement Plan (QIP) Requirements

14.1.3.1 Based on the results of a determination made under the provisions of Condition 14.1.2.3.b, the Division may required the owner or operator to develop and implement a QIP (40 CFR Part 64 § 64.8(a), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.3.2 The owner or operator shall maintain a written QIP, if required, and have it available for inspection (40 CFR Part 64 § 64.8(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.3.3 The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

- a. Improved preventative maintenance practices (40 CFR Part 64 § 64.8(b)(2)(i), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Process operation changes (40 CFR Part 64 § 64.8(b)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- c. Appropriate improvements to control methods (40 CFR Part 64 § 64.8(b)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- d. Other steps appropriate to correct control performance (40 CFR Part 64 § 64.8(b)(2)(iv), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

- e. More frequent or improved monitoring (only in conjunction with one or more steps under Conditions 14.1.3.3.a through d above) (40 CFR Part 64 § 64.8(b)(2)(v), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 14.1.3.4 If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined (40 CFR Part 64 § 64.8(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 14.1.3.5 Following implementation of a QIP, upon any subsequent determination pursuant to Condition 14.1.2.3.b, the Division or the U.S. EPA may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
 - a. Failed to address the cause of the control device performance problems (40 CFR Part 64 § 64.8(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); or
 - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions (40 CFR Part 64 § 64.8(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 14.1.3.6 Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act (40 CFR Part 64 § 64.8(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 14.1.4 Reporting and Recordkeeping Requirements
 - 14.1.4.1 Reporting Requirements: The reports required by Section IV, Condition 22.d, shall contain the information specified in Appendix B of the permit and the following information, as applicable:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable), for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) ((40 CFR Part 64 § 64.9(a)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); and
 - b. The owner or operator shall submit, if necessary, a description of the actions taken to implement a QIP during the reporting period as

specified in Condition 14.1.3 of this permit. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring (40 CFR Part 64 § 64.9(a)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.4.2 General Recordkeeping Requirements: In addition to the recordkeeping requirements in Section IV, Condition 22.a through c.

- a. The owner or operator shall maintain records of any written QIP required pursuant to Condition 14.1.3 and any activities undertaken to implement a QIP, and any supporting information required to be maintained under these CAM requirements (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions) (40 CFR Part 64 § 64.9(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements (40 CFR Part 64 § 64.9(b)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.5 Savings Provisions

14.1.5.1 Nothing in these CAM requirements shall excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act. These CAM requirements shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purposes of determining the monitoring to be imposed under separate authority under the federal clean air act, including monitoring in permits issued pursuant to title I of the federal clean air act. The purpose of the CAM requirements is to require, as part of the issuance of this Title V operating permit, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of CAM (40 CFR Part 64 § 64.10(a)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

14.1.5.2 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to impose additional or more stringent

monitoring, recordkeeping, testing or reporting requirements on any owner or operator of a source under any provision of the federal clean air act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

- 14.1.5.3 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to take any enforcement action under the federal clean air act for any violation of an applicable requirement or of any person to take action under section 304 of the federal clean air act (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

SECTION III - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based upon the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modification or reconstruction on which construction commenced prior to permit issuance.

Emission Unit Description & Number	Non-Applicable Requirement	Justification
P001, P018	Colorado Regulation No. 1, Sections III.B & C and Colorado Regulation No. 6, Part B, Section III	These Units do not meet the definitions of an Incinerator or a Manufacturing Process
P001	Colorado Regulation No. 6, Part B, Section II.D.1, 2	Natural Gas and Propane are the only fuels used to fire the turbines. The units are not capable of burning Coal or Fuel Oil
P004, P005	40 CFR Part 60 Subpart OOO, as adopted by reference in Colorado Regulation No. 6, Part A	These Processes are not considered affected facilities as defined in the Subpart
P012, P015	Colorado Regulation No. 1, Section III.B	These processes do not meet the definition of an Incinerator
Entire Facility	Colorado Regulation No. 6, Part B, Section IV	This facility is not a natural gas desulfurization plant, a petroleum refinery, or an oil shale production facility. Units that emit SO ₂ are covered by other sections of Regulation No. 6
	Colorado Regulation No. 7, Section VI.B.2	Fuels stored on site are exempt from requirements of this Section per VI.B.1 of Regulation No. 7
	Colorado Regulation No. 7, Section VII	No incinerators exist on site
	40 CFR Part 60, Subpart LL, as adopted by reference in Colorado Regulation No. 6, Part A	This facility is a non-metallic mineral processing facility and therefore is not subject to Subpart LL - Metallic Mineral Processing Facilities
	40 CFR Part 60, Subparts D, Da, Db, Dc, E, as adopted by reference in Colorado Regulation No. 6, Part A	The facility does not have any equipment that is defined as a steam generating unit or an incinerator
	40 CFR Part 60, Subparts K and Ka, as adopted by Reference in Colorado Regulation No. 6, Part A	The facility does not have any affected Storage Tanks greater than 40,000 gallon capacity
	Prevention of Significant Deterioration Requirements, 40 CFR Part 52.21 (Colorado Regulation No. 3, Part B, Section IV.D.3)	This source is a minor stationary source based on the potential to emit of the source as determined by information provided by the applicant.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition	Streamlined (Subsumed) Requirements
Section II, Conditions 5.1.3 and 5.8.	40 CFR Part 60 Subpart UUU, as adopted by reference in Colorado Regulation No. 6, Part A
Section II, Condition 1.1.2 and 6.1.	Colorado Regulation No. 6, Part B, Section II.C.2 [fuel burning equipment particulate matter requirement] – State Only Requirement
Section II, Conditions 1.6 and 6.5.	Colorado Regulation No. 6, Part B, Section II.C.3 [opacity of emissions shall not exceed 20%] – State Only Requirement
Section II, Conditions 2.4, 3.5, and 5.8.	Colorado Regulation No. 6, Part B, Section III.C.3 [opacity of emissions shall not exceed 20%] - State Only Requirement
Section II, Conditions 2.1.1, 3.1.1, 4.1.1, 5.1.1, and 8.1.1.	Colorado Regulation No. 6, Part B, Section III.C.2 [process weight rate particulate matter emission limits] - State Only Requirement

SECTION IV - General Permit Conditions (ver. 11/16/2010)

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- c. Compliance certifications shall contain:
 - (i) the identification of each permit term and condition that is the basis of the certification;
 - (ii) the compliance status of the source;
 - (iii) whether compliance was continuous or intermittent;
 - (iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - (v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II.E., II.F., II.I, and II.J

- a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility;
- (ii) Safe sampling platform(s);
- (iii) Safe access to sampling platform(s); and
- (iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall be enforceable only by the State.

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

- (i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
- (ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
- (iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;
- (iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- (v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;
- (viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and
- (x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

- a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
 - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
 - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

- g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.E

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Controls for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "asbestos control."

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

- c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.- II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

- a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
 - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
 - (ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and
 - (iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.
- c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. *[Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.]* A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
 - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
 - (ii) date(s) on which analyses were performed;
 - (iii) the company or entity that performed the analysis;
 - (iv) the analytical techniques or methods used;
 - (v) the results of such analysis; and
 - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs a, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

- a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.
- b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.
- c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.

- d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.
- e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

OPERATING PERMIT APPENDICES

A - INSPECTION INFORMATION

B - MONITORING AND PERMIT DEVIATION REPORT

C - COMPLIANCE CERTIFICATION REPORT

D - NOTIFICATION ADDRESSES

E - PERMIT ACRONYMS

F - PERMIT MODIFICATIONS

G - EXAMPLE DAILY INSPECTION LOG

H - COMPLIANCE ASSURANCE MONITORING PLAN

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, unless otherwise specified in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

APPENDIX A - Inspection Information

Directions to Plant:

The facility is located at 740 Highway 6 in Eagle County south of Interstate 70. From I-70 exit from the east at Exit 147 and head south to Eagle. Proceed west toward Gypsum. Plant will be on the right. From the West, follow Highway 6 from Exit 140 through Gypsum to the plant (left side of road). The mine site is across I-70 and can be seen from the plant. Head north off the I-70 exit onto the dirt road and follow signs for the mine.

Safety Equipment Required:

Hard Hat
Safety Glasses
Ear Protection

Facility Plot Plan:

Figure 1 (following page) shows the plot plan as submitted on March 1, 1995 with the source's Title V Operating Permit Application.

List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Insignificant activities and/or sources of emissions as submitted in the application are as follows:

Laboratory Rock Sample Crusher
18,000 gallon Propane Tank
12,680 gallon Diesel Fuel Storage Tank
Railcar loadout (Point 024, Colorado Construction Permit 84EA192-4F)
Power Screen (formerly Colorado Construction Permit 00EA0038)

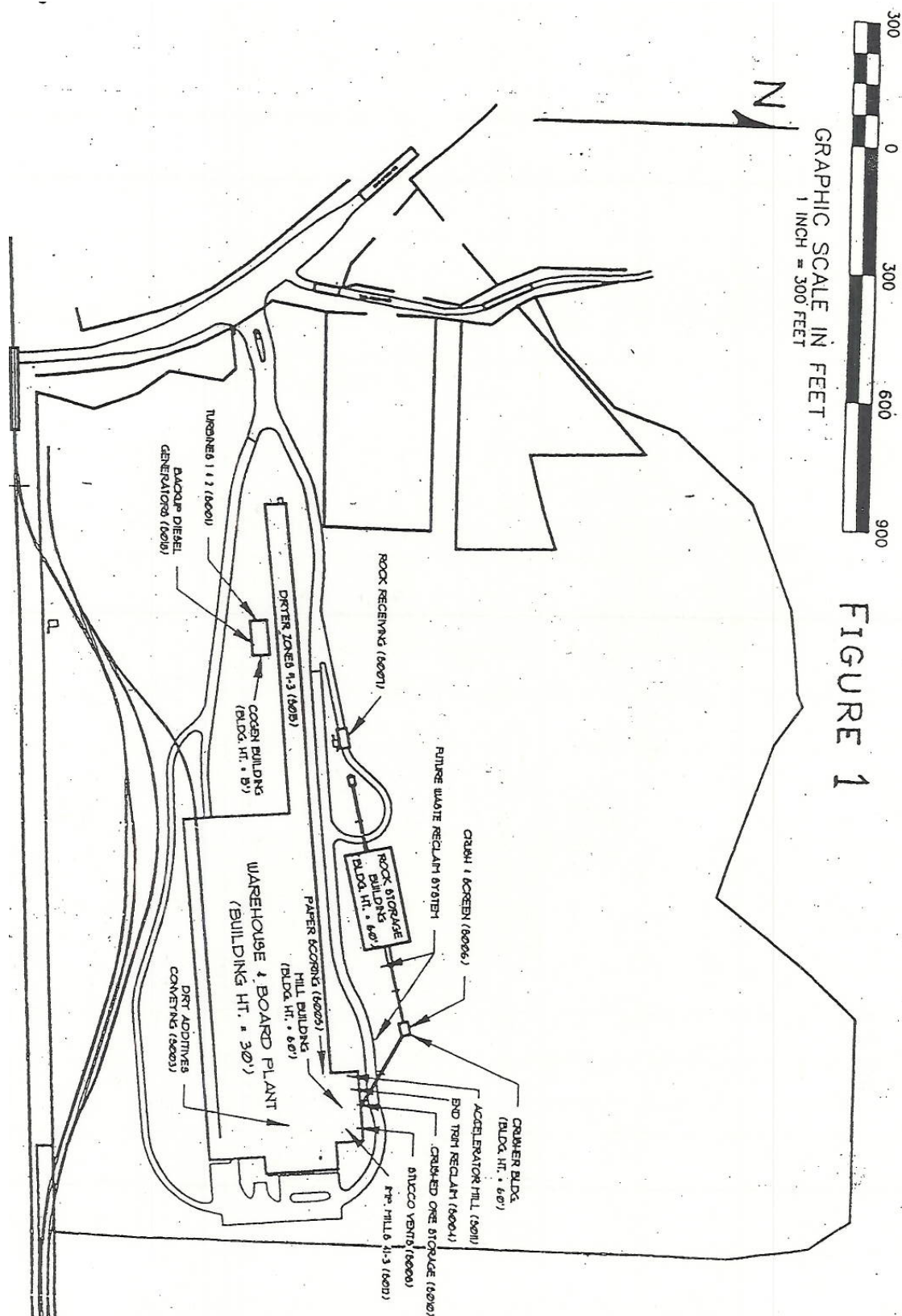


FIGURE 1

APPENDIX B
Reporting Requirements and Definitions
with codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Report #2: Permit Deviation Report (must be reported “promptly”)

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, “malfunction” shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard:	When the requirement is an emission limit or standard
2 = Process:	When the requirement is a production/process limit
3 = Monitor:	When the requirement is monitoring
4 = Test:	When the requirement is testing
5 = Maintenance:	When required maintenance is not performed
6 = Record:	When the requirement is recordkeeping
7 = Report:	When the requirement is reporting
8 = CAM:	A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
9 = Other:	When the deviation is not covered by any of the above categories

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation

to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.¹
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

¹ For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Startup, Shutdown, Malfunctions and Emergencies,

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

Under the Emergency provisions of Part 70 certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Monitoring and Permit Deviation Report - Part I

- Following is the **required** format for compliance monitoring reports to be submitted to the Division on a semi-annual basis, unless otherwise noted in the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or upset or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or Upsets) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: American Gypsum Company – Eagle Plant

OPERATING PERMIT NO: 95OPEA041

REPORTING PERIOD: _____

Operating Permit Unit ID	Unit Description	Deviations Noted During Period? ¹		Deviation Code ²	Upset/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
P001	Two (2) Allison Natural Gas Fired Cogeneration Turbines rated at 30 MMBtu/hr, Model 501-KB5, Serial Nos. AST742 and ASP912. Propane is Used as Backup Fuel.					
P003	Schick Dry Additives Conveying System, Serial No. 84-AJ16.					
P002	End Trim Reclaim of Scrap Product, Process Design Associates - Custom					
P005	Paper Creasing, Scoring and Buffing System, ABB Raymond					
P006	Crushing of Ore, Process Design Associates - Custom					
P007	Rock Receiving Station, Process Design Association - Custom					
P008	Two (2) Screw Conveyors and Bucket Elevators for Transport of Calcined Ore to Enclosed Stucco Storage, Stucco Vents, Process Design Association - Custom					
P010	Three (3) Crushed Ore Storage Bins, Process Design Association – Custom. Each bin feeds one impact mill.					
P011	Accelerator/Landplaster Mill, Raymond #10					
P012	Three (3) Impact Mills (Raymond #83). Each Equipped with Direct Natural Gas Fired North American 6795-14-54 Burners (22.5 MMBtu/hr Each)					

Operating Permit Unit ID	Unit Description	Deviations Noted During Period? ¹		Deviation Code ²	Upset/Emergency Condition Reported During Period?	
		YES	NO		YES	NO
P015	COE, Four (4) Zoned, Ten (10) Deck Wallboard Dryer Equipped with One (1) COE Eclipse Natural Gas Fired Burner Per Zone (35 MMBtu/hr)					
P018	Two (2) Detroit Model 149-16VTI Internal Combustion Engines Used to Power Back-UP Generators, Max Design 2010 hp, Serial Nos. 16E-9937 and 16E-9938.					
P020	Waste Reclaim System Consisting of Crusher and Conveyors for Recycling Off-Specification Wallboard (rated at 30 tons/hr).					
P021	Starch Storage Silo					
P022	Tech Air Systems, Model No. 64AVS8 Style III, Dunnage Cutting Machine					
P023	Mining Fugitive Emissions					
P025	One (1) Cummins, Model CT8.3-G2 B990858973, distillate fuel oil fired reciprocating internal combustion engine (207 HP)					
	General Conditions					
	Insignificant Activities					

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

²Use the following entries as appropriate:

- 1 = Standard:** When the requirement is an emission limit or standard
- 2 = Process:** When the requirement is a production/process limit
- 3 = Monitor:** When the requirement is monitoring
- 4 = Test:** When the requirement is testing
- 5 = Maintenance:** When required maintenance is not performed
- 6 = Record:** When the requirement is recordkeeping
- 7 = Report:** When the requirement is reporting
- 8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.
- 9 = Other:** When the deviation is not covered by any of the above categories

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: American Gypsum Company – Eagle Plant

OPERATING PERMIT NO: 95OPEA041

REPORTING PERIOD: _____

Is the deviation being claimed as an: Emergency _____ Upset _____ N/A _____

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction _____
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Operating Permit Condition Number Citation

Explanation of Period of Non-Compliance

Duration

Action Taken to Correct the Problem

Measures Taken to Prevent a Reoccurrence of the Problem

Dates of Upsets/Emergencies Reported (if applicable)

Deviation Code (for Division Use Only) _____ Division Code QA: _____

SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

OPERATING PERMIT NO: 96OPZZXXX
REPORTING PERIOD: 1/1/96 - 6/30/96

Is the deviation being claimed as an: Emergency _____ Upset XX N/A _____

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction _____
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:
Asphalt Plant with a Scrubber for Particulate Control - Unit XXX

Operating Permit Condition Number Citation

Section II, Condition 3.1 - Opacity Limitation

Explanation of Period of Non-Compliance

Slurry Line Feed Plugged

Duration

START- 1730 4/10/96
END- 1800 4/10/96

Action Taken to Correct the Problem

Line Blown Out

Measures Taken to Prevent Reoccurrence of the Problem

Replaced Line Filter

Dates of Upsets/Emergencies Reported (if applicable)

4/10/96 to S. Busch, APCD

Deviation Code (for Division Use Only) _____ Division Code QA: _____

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: American Gypsum Company – Eagle Plant

FACILITY IDENTIFICATION NUMBER: 0370029

PERMIT NUMBER: 95OPEA041

REPORTING PERIOD: _____ (See first page of the permit for specific reporting period and dates)

All information for the Title V Semi-Annual Monitoring Reports must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

STATEMENT OF COMPLETENESS

I have reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in Sub-Section 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this application is guilty of a misdemeanor and may be punished in accordance with the provisions of Sub-Section 25-7 122.1, C.R.S.

Printed or Typed Name

Title

Signature

Date Signed

Note: Deviation reports shall be submitted to the Division at the address given in Appendix D of this permit. No copies need be sent to the U.S. EPA.

APPENDIX C
Format for Annual Compliance Certification Reports

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: American Eagle Company – Gypsum Plant
OPERATING PERMIT NO: 95OPEA041
REPORTING PERIOD:

I. Facility Status

___ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

___ With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitoring Method per Permit? ²		Was compliance continuous or intermittent? ³		Was Data Continuous? ⁴	
		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO
P001	Two (2) Allison Natural Gas Fired Cogeneration Turbines, rated at 30 MMBtu/hr, Model 501-KB5, Serial Nos. ASP742 and ASP912. Propane is Used as Back-up Fuel.								
P003	Schick Dry Additives Conveying System, Serial No. 84-AJ16.								
P004	End Trim Reclaim of Scrap Product, Process Design Associates - Custom								
P005	Paper Creasing, Scoring and Buffing System, ABB Raymond								
P006	Crushing or Ore, Process Design Associates - Custom								
P007	Rock Receiving Station, Process Design Associates - Custom								

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitoring Method per Permit? ²		Was compliance continuous or intermittent? ³		Was Data Continuous? ⁴	
		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO
P008	Two (2) Screw Conveyors and Bucket Elevators for Transport of Calcined Ore to Enclosed Stucco Storage, Stucco Vents, Process Design Associates - Custom								
P010	Three (3) Crushed Ore Storage Bins, Process Design Associates – Custom. Each bin feeds one impact mill.								
P011	Accelerator/Landplaster Mill, Raymond #10								
P012	Three (3) Impact Mills (Raymond # 83) Equipped with Direct Natural Gas Fired North American 6795-14-54 Burners (22.5 MMBtu/hr Each)								
P015	COE, Four (4) Zone, Ten (10) Deck Wallboard Dryer Equipped with One (1) COE Eclipse Natural Gas Fired Burner Per Zone (35 MMBtu/hr)								
P018	Two (2) Detroit Model 149-16VTI Internal Combustion Engines Use to Power Back-up Generators, Max Design 2010 hp, Serial Nos. 16E-9937 and 16E-9938.								
P020	Waste Reclaim System Consisting of Crusher and Conveyors for Recycle Off-Specification Wallboard (rated at 30 tons/yr)								
P021	Starch Storage Silo								
P022	Tech Air Systems, Model No. 64AVS8 Style III, Dunnage Cutting Machine								
P023	Mining Fugitive Emissions								
P025	One (1) Cummins, Model CT8.3-G2 B990858973, distillate fuel oil fired reciprocating internal combustion engine (207 HP)								

Operating Permit Unit ID	Unit Description	Deviations Reported ¹		Monitoring Method per Permit? ²		Was compliance continuous or intermittent? ³		Was Data Continuous? ⁴	
		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO
	General Conditions								
	Insignificant Activities ⁴								

¹ If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

² Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

³ Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

⁴ Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II. Status for Accidental Release Prevention Program:

- A. This facility _____ is subject _____ is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act)
- B. If subject: The facility _____ is _____ is not in compliance with all the requirements of section 112(r).
1. A Risk Management Plan _____ will be _____ has been submitted to the appropriate authority and/or the designated central location by the required date.

III. Certification

All information for the Annual Compliance Certification must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

Printed or Typed Name

Title

Signature

Date Signed

NOTE: All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

APPENDIX D
Notification Addresses

1. Air Pollution Control Division

Colorado Department of Public Health and Environment
Air Pollution Control Division
Operating Permits Unit
APCD-SS-B1
4300 Cherry Creek Drive S.
Denver, CO 80246-1530

ATTN: Matt Burgett

2. United States Environmental Protection Agency

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice
Mail Code 8ENF-T
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, CO 80202 – 1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance
Air and Radiation Programs, 8P-AR
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, CO 80202 – 1129

APPENDIX E
Permit Acronyms

Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in MMBtu/hr
FR -	Federal Register
G -	Grams
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)
LAER -	Lowest Achievable Emission Rate
LB -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N/A or NA -	Not Applicable
NO _x -	Nitrogen Oxides
NESHAP -	National Emission Standards for Hazardous Air Pollutants
NSPS -	New Source Performance Standards
P -	Process Weight Rate in Tons/Hr
PE -	Particulate Emissions
PM -	Particulate Matter
PM ₁₀ -	Particulate Matter Under 10 Microns
PSD -	Prevention of Significant Deterioration
PTE -	Potential To Emit

RACT -	Reasonably Available Control Technology
SCC -	Source Classification Code
SCF -	Standard Cubic Feet
SIC -	Standard Industrial Classification
SO ₂ -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
TOC -	Total Organic Compounds
VOC -	Volatile Organic Compounds

APPENDIX F
Permit Modifications

DATE OF REVISION	TYPE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION

APPENDIX G
Example Daily Inspection Log

Date of Inspection: / /

Equipment Identification	In Operation/ Full Production (Y/N)	Visible Emissions (Y/N)	Opacity Reading Conducted (Y/N)	Six-Minute Average	Manometer Gauge Reading	Within Acceptable Range (Y/N)	Investigate /Initiate Maintenance (Y/N)*	Routine Maintenance or Semi-Annual Inspection Performed (Y/N)**	Any Excursion Reporting Required (Y/N)***
P003 - Dry Additives									
P004 - End-Trim Reclaim CAM									
P005- Paper Creasing and Scoring									
P006 - Crushing									
P007 – Rock Receiving CAM									
P008 - Stucco Storage	#1								
	#2								
P010 - Crushed Ore Storage	#1								
	#2								
	#3								
P011 - Accel. Mill									
P012 - Impact Mills CAM	#1								
	#2								
	#3								

Equipment Identification	In Operation/ Full Production (Y/N)	Visible Emissions (Y/N)	Opacity Reading Conducted (Y/N)	Six-Minute Average	Manometer Gauge Reading	Within Acceptable Range (Y/N)	Investigate /Initiate Maintenance (Y/N)*	Routine Maintenance or Semi-Annual Inspection Performed (Y/N)**	Any Excursion Reporting Required (Y/N)***
P020 Waste Reclaim									
P021 – Starch Silo									
P022 – Dunnage Cutting Machine									

* Baghouse shall be investigated if any visible emissions are seen or the manometer gauge is outside the acceptable range. Provide detailed information on the lines below

** The permit requires that routine maintenance be performed in accordance with manufacturer's requirements. The permit also requires semi-annual inspections of the baghouses. In addition to marking yes or no, indicate whether the action was routine maintenance or semi-annual inspection.

*** Excursions are reported with the semi-annual reports. Excursions are anytime visible emissions are observed or the manometer gauge is outside of the acceptable range. Excursions only apply to CAM sources.

Comments (Investigation results and/or recommended maintenance): _____

Maintenance Action Completed on this Date: _____

Observer's Name: _____

APPENDIX H Compliance Assurance Monitoring Plan

I. Background

a. Emission Units Description:

End-Trim Reclaim (P004), Rock Receiving (P007) and the Impact Mills (P012) – all are process steps in the production of gypsum wallboard that are sources of particulate matter emissions and are equipped with baghouses.

Note that since all pollutant specific emission units have similar control devices and limitations, the following CAM plan applies to all emission units.

b. Applicable Regulation, Emission Limit, Monitoring Requirements:

1. End Trim Reclaim (P004)

Regulation:	Regulation No. 1, Section III.A.1.b
Emission Limitations:	PM (lb/hr) not to exceed $3.59(P)^{0.62}$, if $P \leq 30$ tons/yr OR PM (lb/hr) not to exceed $17.31(P)^{0.16}$, if $P > 30$ tons/yr Where P = process weight rate in tons/hr
Regulation:	Operating Permit Condition 4.1.2 (underlying Colorado Construction Permit 89EA432-3, as modified under the provisions of Section I, Condition 1.3 of the Operating Permit)
Emission Limitations:	PM = 7.5 tons/yr PM ₁₀ = 5.6 tons/yr
Monitoring Requirements:	Pressure Differential and Visible Emissions

2. Rock Receiving (P007)

Regulation:	Regulation No. 1, Section III.A.1.b
Emission Limitations:	PM (lb/hr) not to exceed $3.59(P)^{0.62}$, if $P \leq 30$ tons/yr OR PM (lb/hr) not to exceed $17.31(P)^{0.16}$, if $P > 30$ tons/yr Where P = process weight rate in tons/hr
Regulation:	Operating Permit Condition 3.1.2 (underlying Colorado Construction Permit 89EA432-6, as modified under the provisions of Section I, Condition 1.3 of the Operating Permit)
Emission Limitations:	PM = 1.4 tons/yr
Regulation:	40 CFR Part 60 Subpart OOO § 60.672(a)(1), as adopted by reference in Colorado Regulation No. 6, Part A
Emission Limitations:	PM = 0.05 g/dscm (grams per dry standard cubic meter)
Monitoring Requirements:	Pressure Differential and Visible Emissions

3. Impact Mills (P010)

Regulation: Regulation No. 1, Section III.A.1.b
Emission Limitations: PM (lb/hr) not to exceed $3.59(P)^{0.62}$, if $P \leq 30$ tons/yr **OR**
PM (lb/hr) not to exceed $17.31(P)^{0.16}$, if $P > 30$ tons/yr
Where P = process weight rate in tons/hr

Regulation: Operating Permit Condition 5.1.2 (underlying Colorado
Construction Permit 89EA432-11, as modified under the
provisions of Section I, Condition 1.3 of the Operating Permit)

Emission Limitations: PM = 7.35 tons/yr
PM₁₀ = 7.35 tons/yr

Regulation: 40 CFR Part 60 Subpart OOO § 60.672(a)(1), as adopted by
reference in Colorado Regulation No. 6, Part A

Emission Limitations: PM = 0.05 g/dscm (grams per dry standard cubic meter)

Monitoring Requirements: Pressure Differential and Visible Emissions

c. Control Technology:

End Trim Reclaim: Baghouse, Aeropulse PR-256-10-C-N
Rock Receiving: Baghouse, Aeropulse PR-54-10-WP-N
Impact Mills: Baghouse, Micropulse 620-3-10 TRH

II. Monitoring Approach

	Indicator 1	Indicator 2
I. Indicator Measurement Approach	<p>Visible Emissions</p> <p>Visible emissions from the baghouses will be monitored daily by conducting a visible emission observation for 6 minutes in accordance with the procedures in Method 22.</p>	<p>Pressure Differential</p> <p>The manometers for each baghouse shall be read and recorded daily.</p>
II. Indicator Range	<p>An excursion is identified as any visible emissions. Excursions trigger the source to investigate the baghouse performance and make any repairs or adjustments necessary. A log of any repairs shall be maintained and made available upon request.</p>	<p>An excursion is identified as any time during which the manometer reading is above 6" or below 1" of water. Excursions trigger the source to investigate the baghouse performance and make any repairs or adjustments necessary. A log of any repairs shall be maintained and made available upon request.</p>
III. Performance Criteria		
a. Data Representativeness	<p>Measurements are being made at the emissions point (baghouse), except for Crushed Ore Storage. For this emission unit the baghouse exhausts inside the building</p>	<p>Measurements via pressure taps are made at the inlet and outlet of the baghouse using manometers. The monometer has an accuracy of + 0.001" W.C. (water column)</p>
b. QA/QC Practices and Criteria	<p>Certification is not required for Method 22 observations but personnel shall be trained in general procedures for the determination of visible emissions. Persons performing the visible emission observations shall be trained in determining the presence of visible emissions. A list of observers trained to perform the visible emission observations shall be maintained.</p>	<p>Manometer gauges will be inspected monthly. Repairs will be made as necessary according to manufacturer's recommendations.</p>
c. Monitoring Frequency	<p>Six (6) minute visible emission observations using Method 22 are conducted daily. Results of the daily readings shall be recorded in a log book.</p> <p>Note: If the plant is shut down for maintenance for four (4) consecutive daylight hours or more, no visible emission observations are required for that day, provided a pressure differential reading is recorded for that day..</p>	<p>The pressure drop across the inlet and outlet of the baghouse shall be recorded daily. Results of the daily reading will be recorded in a log book.</p>
	<p>Failure to either conduct a visible emission observation or record a pressure drop on any day for any emission unit shall be reported as an excursion.</p>	

III. Justification

a. Background:

This facility manufactures gypsum wallboard. The specific emission units and control devices are as follows:

Emission Unit	Description	Control Device
End Trim Reclaim (P004)	The ends of the wallboard are sawed off at this emission unit.	Aeropulse Baghouse (PR-256-10-C-N), containing 256 bags, with an exhaust flow of 18,500 CFM.
Rock Receiving (P007)	This emission unit is the rock dump point. Gypsum received from the mine is dumped here to begin processing into wallboard.	Aeropulse Baghouse (PR-54-10-WP-N), containing 63 bags with an exhaust flow of 4,000 CFM.
Impact Mills (P012)	Crushed ore is milled further and calcined.	Three (3) Micropulse Baghouses (620-3-10-TRH), each containing 620 bags, each with an exhaust flow of 36,000 CFM.

b. Rational for Selection of Performance Indicators:

Visible emissions were selected as an indicator because the presence of visible emissions is indicative of baghouse performance. If the baghouse is performing properly, then there should be no visible emissions. An increase in visible emissions indicates reduced performance of a particulate control device, therefore, the presence of visible emissions is used as an indicator.

The pressure differential was selected as an indicator because the pressure differential across a baghouse can be indicative of problems with the baghouse operation, such as broken bags, bad seals at the tube sheet, plugged ash hopper or plugged ash line. A high pressure differential can be an indication of plugged bags and a low pressure differential can be an indication of broken bags, both of which would affect the performance of the baghouse.

c. Rational for Selection of Indicator Ranges:

For visible emissions an indicator range of no visible emissions was selected. This level was selected because an increase in visible emissions indicates an increase in particulate matter emissions. When visible emissions are detected, corrective action will be initiated, beginning with reporting the excursion to maintenance. Corrective action will be initiated according to manufacturer's recommendations and any corrective action taken will be recorded in a log.

For pressure differential, an indicator range of less than 1 and more than 6" of water was selected. This range was selected because a high or low pressure differential can be indicative of

problems with the baghouse such as broken or plugged bags. The manufacturer recommends that the baghouse be operated within 1 to 6" of water for optimum efficiency range. It has been American Gypsum's operating experience that visible emissions are not generally present when the baghouse is operated between 1 and 6" of water. When the baghouse pressure differential either falls above 1" or exceeds 6" of water, corrective action will be initiated, beginning with reporting the excursion to maintenance. Corrective action will be initiated according to manufacturer's recommendations and any corrective action taken will be recorded in a log.

P